DOCUMENT RESUME

ED 080 479 SP 006 757

TITLE	International Congress of the International Council of Health, Physical Education, and Recreation (14th, Kingston, Jamaica, July 30-August 3, 1971).
INSTITUTION	International Council on Health, Physical Education, and Recreation, Washington, D.C.
PUB DATE	72
NOTE	95p.
AVAILABLE FROM	ICHPER, 1201 16th St., N.W., Washington, D.C. 20036 ($2.95)
EDRS PRICE	MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	*Athletic Activities; *Physical Activities; Physical Education; Physically Handicapped; *Physical Therapy; *Womens Education

ABSTRACT

Papers presented at the Fourteenth International Congress of the International Council on Health, Physical Education, and Recreation (ICHPER) are included in this document. Among the subjects discussed are suggestions for physical education in the 1970's (primary school level, research divisions for the 1970's, research needs in girls and women's sports, movement education, child nutrition in rural areas, and recreation for the handicapped. (JB)

ED 080479

The Fourteenth International Congress of the International Council on Health, Physical Education, and Recreation

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KINGSTON, JAMAICA

July 30-August 3, 1971

SP 006 757

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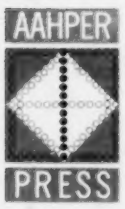

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INTERNATIONAL COUNCIL ON HEALTH, PHYSICAL EDUCATION AND RECREATION

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Suggestions for Physical Education in the 1970s

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Conceptual and Professional Problems

To confine our reflections to concrete points, we should become aware of some conceptual and professional problems.

The Meaning of Physical Education. —The first problem lies in finding ways to limit the term physical education and to synthesize the ways in which it is understood in different countries and cultural areas. Although the words are translated identically, they are not understood in the same way in the American cultural area as in the various countries of Western Europe. The countries of Eastern Europe speak more of physical culture or bodily culture than of physical education. Even in the case of disciplines which are included in the physical education concept, we find discrepancies in the way entities like gymnastics are understood in the United States and in Europe. Expressions of such particular meaning as the English gymnastics, the Spanish gimnasia educativa, the French éducation psychocinétique, the German leibeserziehung or gymnastik, are like a window which shows us the extensive series of problems which this terminological Babel poses. For some people, physical education and sport are related terms and partly synonymous. For others, nurtured in a stricter gymnastic tradition, physical education is something essentially different from sport.

The different conceptions of physical education throughout the world challenge us to incorporate everything of value that can be taken from each conception. A legitimate starting point is to [illegible] the meaning of the terms themselves. Physical education is any type of education that pays special attention to human physical capacities. It is not simply the education of the organism or the locomotor apparatus. The permanent object and subject of education is the human being; a part of the individual can never be educated; it can only be trained. Education acts upon the individual as such, and to achieve this, use may be made of the training of parts.

The object of physical education is man, with his physical possibilities of action and expression. The human organic complex, by itself, does not seem to be a specific object of physical education, but rather of physiology or biology. Physical education should concern itself with man and his physical capacity and expression. Consequently, it tends fundamentally (though not exclusively) toward man in motion. Naturally, physical education should also be concerned with the quest for a generally healthy organic condition, independent of exercise or effort, but here physical education becomes confused with hygiene, preventive medicine, etc. The situation of man as the subject of physical education materializes in movement, organic effort, and, generally, when exclusively concerned with achieving a good organic condition. Physical education uses as its human instrument, man himself, in motion or in a situation of effort. The science of physical education might almost coincide with a science of man in motion. For this reason, the term kinanthropology, proposed by the Institute of Physical Education of the University of Liège, seems extremely appropriate.

Status of Physical Education. —The evolution of this branch of education has been influenced in different ways by the contemporary history of each country or cultural area. In some places, physical education is accepted as an important educational entity. The teams of specialists are looked upon with the same esteem as teachers of traditional subjects. On the other hand, in other areas, physical education is undervalued in comparison with other disciplines; its teaching structure potentials are undeveloped.

Another fairly general problem is the discrepancy between the role that is assigned to the physical education teacher by society in most countries and the sense that the teacher has of himself.

Professional Preparation. —Some universities have a doctoral program in physical education specifically; others offer doctorates in philosophy, education, and sciences—not specifically concerned with physical education, but including studies, practical experience, and research carried out in faculties or institutes. Other institutions have higher

qualifications which, however, do not fit into the rigorous academic terminology such as teacher of physical education which exists in so many countries, and minor qualifications, such as instructors, or monitors. We find the most varied range of instruction, requirements, and educational levels in the institutions created to train teaching staff.

Physical Education and Related Subjects

To this variety and inconsistency must be added another problem which is on the increase—the progressive accumulation of subjects and disciplines. This accumulation is found especially in institutions where physical education teachers are trained at the university level.

Nobody questions the importance of the sciences related to biology, such as anatomy, or physiology as parts of a competent physical education. They are, indeed, the disciplines of traditional prestige in physical education. On the other hand, the significance of a proper physical education including the pedagogic sciences in general, and the sciences of human behavior, like psychology, is becoming more and more recognized. The educational function of the physical instructor requires a cultural and humanistic conception of his training. The knowledge, and above all the humanistic outlook of the future teacher of physical education are considered more and more important. For this reason, subjects such as philosophy, anthropology, history, and art are being incorporated into the curriculum. Sociology and its various aspects and techniques are becoming increasingly indispensable.

To this broad panorama should be added certain sciences peculiar to physical education, such as biomechanics (which some people tend to specify as anthropo-bio-mechanics). On the other hand, it is becoming increasingly necessary to have some knowledge of certain auxiliary sciences which, because of their importance in work efficiency, become conditioning sciences. These are the sciences related to cybernetics, electronics, etc. Together with all this, there is the varied world of sporting techniques, whose identification with physical education is becoming obvious. The flood of disciplines which accumulates in the curriculum of the modern physical education specialist creates problems difficult to solve. These problems include the dispersion of knowledge, lack of depth through the excessive breadth of studies, the interference of the physical education specialist in other scientific fields (with the consequent mistrust of other specialists), and the increase in the length of study time.

The Need for Professional Unity

It is urgent to bring all efforts together, and exchange opinions to harmonize the objectives of physical education. We must attain, as far as possible, a certain homogeneity of organization and action. To achieve this, the first step should be taken at the level of the theory of science. We must fix the specific obiectum formale of this applied science which we term physical education, if it exists, and at the same time delimit its scientific subject matter (corpus) and its methodology. If we succeed in fixing these realities in some way, we shall be able to speak of short and long term objectives and of making programs—even taking into account the diversity of situations which will condition the realization of such programs in each country. One would have to respect the rich variety of nuances and concrete objectives imposed by such a diversity of conditioning factors. This variety must never be the result of a confusion of principle, or of a basic failure to understand the science that must form the backbone of our task.

Defining Physical Education

An applied science should be defined fundamentally by the objectives to which it is to be applied. If we review the work that is being carried out today by the specialists in physical education (with their various qualifications) we find a wide variety of functions:

1. Participation in teaching at various levels
2. Physical instruction in top competitive sports
3. Collaboration in the maintenance and improvement of physical condition in sports clubs
4. Physical preparation and training for certain specialized jobs (gymnastics for the working populace)
5. Physiotherapy for the disabled
6. Education and integration of the abnormal
7. Rehabilitation in general
8. Maintenance of good physical condition in adults (voluntary gymnastics, etc.)
9. Organization of social sporting activities.

If we were to try to determine the essential constitutive factors of physical education in direct ratio to their concrete objectives, we would find ourselves with not one, but several physical educations. There is not only a great difference between the purposes of physical exercises for a primary school pupil and a sports champion, but also a disparity of procedure. For this reason, if we believe in a united physical education, we cannot define it directly by its various tasks, but rather we must look for some common factor in all these tasks.

But if we analyze the essential behavior that underlies each of these different tasks, we will find human movement as the common denominator. Human movement serves as the axis of all the tasks that come into play in attaining any of the objectives previously mentioned—school education, physical sports training, rehabilitation, etc. There is something common, central, axial, to all these tasks—human movement. We shall be able to speak of a unified physical education if we base it on human movement. The scientific part of physical education could be termed kinanthropology. Physical education would be the application of this science within the area of applied educational sciences.

Kinanthropology and Related Sciences.—Is it feasible, scientifically, to delimit this kinanthropology from other sciences?

Man in movement establishes a new reality—himself under special conditions. Effort and organic work place him between new coordinates. New homeostatic situations are to be sought and new capabilities adapted to the efforts required by various styles and necessities of movement. Thus, together with a type of physiology which takes normal man at rest as its starting point, kinanthropology opens out on to a specific kind of physiology which could be called the physiology of exercise or physiology of effort. The same thing happens with traditional biological sciences such as biology, anatomy, physiology, and their many offshoots, all of which enter the frame of reference of kinanthropology from a new point of view—movement and effort. At the center of this new evaluation of biology is biomechanics which, in the new perspective of kinanthropology, becomes the specific center of the biological sciences and, in a way, the objective towards which the traditional biological sciences tend. Biochemistry, cybernetics, and molecular biology continue to have great importance as auxiliary and instrumental sciences, but with growing methodological importance.

The other great field of study of man in motion is the so-called, humanistic body of sciences (humanistic here is given wide cultural meaning and pedagogic reference). Psychology, philosophy, pedagogics, sociology, history, and anthropology—even art, law, and politics—contribute themes directly relevant to the phenomenon of man expressing himself in movement. The cultural habits, fashions, and institutions that man creates by expressing himself in movement may become the direct object of our specific science.

Necessary Movement and Free Movement

The myriad ways of achieving the objectives that man seeks to attain through his movements can be polarized into two great modes, distinguished mainly by the frame of mind in

which he sets about them. The first mode includes obligatory, necessary, utilitarian movements; the second includes spontaneous, free, disinterested movements. In the first area, the entire anthropological history of war and work can be situated; in the second, actions which show the work of the human spirit can be included. Kinanthropology aims directly at the second area.

Dance and Sport. —In the second mode, spontaneous human expression through movement, there arise two essential anthropological realities—dance and physical agonistic play (later understood as sport). These two are, consequently, the cultural forms which will channel, polarize, and in some way specify humanistic sciences in such a way that they can become the specific object of kinanthropology. Dance and sport are the two great modes in which man has culturally expressed himself in a primary manifestation of movement. Kinanthropology (the scientific version of our theme) and physical education (the pedagogic version) must have dance and sport as central objects of cultural investigation. The dance, because of a series of historical conditioning factors, has passed into cultural areas far removed from modern conceptions of physical education. It is no easy task to break already hardened molds and claim for our scientific field this important mode of human expression through movements. However, for the purpose of these reflections, which should deal with existing situations, let us dispense with the dance.

Gymnastics and Sport. —It is impossible to ignore the important role played by gymnastic movements in modern physical education and the great conditioning effect and interconnection which exist between the institutions of physical education and gymnastics. For this reason, we must add gymnastics in all its forms as a spontaneous mode of human expression and as an important contribution to the study of movement. In this way, then, excluding dance, the two prisms whose influence and transformation the anthropologico-humanistic sciences must accept in order to have specific application to our discipline are sport (ludo-competitive exercise) and gymnastics (the sum of analytic methods and techniques of movement). We shall find, then, as anthropologico-humanistic sciences peculiar to our task, the psychology of sport, the psychology of competition, the sociology of sport, the dynamics of sporting groups, the pedagogics of sport, the history of physical education and sport, and, entering the anthropologico-philosophical realm, the idea of homo ludens (homo agonisticus or anthropos agonistikos). In a sociological orientation of top-level competitive sport, the modern homo faber-competitivus is found, as well as the suggestive field of aesthetic bodily training, of motor training in general, and finally, any of the sciences concerned with the explanation, in human terms, of any form of sport (basketball, football, swimming, athletics, tennis, etc.).

The research areas opened up by various sporting and gymnastic techniques would form a group apart. However, these fields, generally directed toward top-level sporting performance and progressive stylistic requirements, come to delimit and almost coincide with the biomechanical and biochemical fields of study. Looked at in other ways, they belong to the realm of psychology.

Instrumental Sciences

Naturally, the perfection of any instrument contributes to the improvement of sport, and, in our case, of research and science. For this reason, one can accept physical education into scientific fields which, considered through kinanthropology, may serve as instrumental sciences—even if they are considered fully autonomous sciences in their own area. Within this group may be considered the wide range of cybernetics and derived sciences, including information theory, bionics, etc., with their peculiar characteristics. Any investigation into the psychology of effort, biomechanics, etc., requires the collection of data, correlations, mathematical operations—which require more and more contributions from the above-mentioned sciences.

Let us likewise accept, in this capacity as auxiliary sciences, radiology, the wide field of electronics, photochemistry, and in general, any kind of science based on technical and instrumental improvement.

Research in all these fields, which more or less directly apply to the subjects constituting physical education, can be enormously useful, providing that their status as instruments is not forgotten.

Relationships of Instrumental Sciences.—We have thus delimited four important scientific areas. Two of them (areas B and C in the diagram on page 14) are special to kinanthropology. Area A assembles the two great groups of sciences which can, in a sense, be considered as the progenitors of our kinanthropology (or physical education) since they are the ones that study man from two more or less clearly defined attitudes or positions—the biological and the humanistic positions. Area B constitutes our specific science and specifically maintains the dichotomy of the biological and humanistic groups as derived from their mother sciences. Area C first relates the specific fields of our science to the direct forms of human movement—principally sport—and second, to the modern gymnastic tradition. An enormous variety of research fields can be found as a result of the great diversity of sporting and gymnastic modes and techniques. A strict logic of anthropological rigor, not afraid to transcend set patterns, stereotypes, and artificial traditions, would demand the inclusion of dance, with its various aspects and derivations.

Area A

Anatomy
Physiology
Biochemistry
Muscular Biology
Etc.

Psychology
Pedagogics
Sociology
History
Philosophy
Anthropology
Etc.

Man in
Movement

Area B

Applied Functional Anatomy
Physiology of Exercise
Biomechanics
Kinesiology
Motor-training

Psychology of Agonistic
Psychology of Sport
Pedagogics of Sport
Pedagogics of Free Movement
Sociology of Sport
History of Physical Education
and Sport
Homo Ludens
Homo Certans Agonisticus
(Anthropos Agonistikos)
Etc.

Kinanthropology
Physical-sports Education

Area C

Sport
Dance (?)
Gymnastics

Area D

Instrumental Sciences

Cybernetics
Information Theory
Bionics
Electronics
Photochemistry
Etc.

Closely related:

Sports Medicine
Preventive Hygiene
Psychopathology of Competition
Etc.

Scientific disciplines which group around sports medicine, are sometimes so close to the field of kinanthropology in its biological aspects, that very often the two are almost impossible to demarcate. However, they are not, strictly speaking, kinanthropology since they study man from the point of view of pathology, or disorders in his physical performance, or in the prevention of such pathological symptoms or disorders. Preventive hygiene, the varied world of orthopaedic prophylaxis, the psychopathology of competition, even corrective gymnastics, and other related disciplines occupy the area we could call closely related sciences.

The difference between areas A and B is human movement, as we have defined it. But the existence of a physiology of effort or exercise may also have reference to exercise or effort in obligatory work. The factor that differentiates area B from area A is human movement as it appears in the gambit of area C, that is, spontaneous free movement with all its sociological, anthropological, and cultural consequences. Accordingly, the physiology of exercise carried out in the labor field is not an appropriate scientific subject for our kinanthropology.

Becoming a Science

This definition of the scientific characteristics of kinanthropology, which gives rise to physical education as a specific applied science, can free us from the series of errors caused by its varied practical objectives. The techniques applicable to a physical education class and the training of an important athlete are indeed very different. But both are based on spontaneous human movement. This distinctive characteristic delimits the proper basis of all these tasks, and groups them all around a proper formal object—the principle of a scientific delimitation. From now on we can speak of a unified physical education, even if it has a plurality of applications.

A second step toward becoming a science includes the description of its scientific subject-matter (corpus). It is a suggestive task, and I am convinced it would be successful if one were to start from the object-specification that we have established. However, it is an arduous task which by far exceeds the limits of these suggestions, and I pass it on to the specialist.

Specific methodology is a more problematic affair. In the classical theory of science, one of the indispensable conditions in becoming a science was to have a specific method. Such a thesis is doubtless valid in any kind of science formed as a result of the demands of specialization. One cannot speak of a new science until it has a clearly defined method of its own to distinguish it from other related sciences. But our case is irksomely singular. Physical education is not an offshoot science; it is the convergence of more or less similar tasks

which have arisen in different human fields of activity and which popular intuition have gradually grouped under a single common heading. Some have called it a transversal science, because it shares the problems of other very different, solidly established sciences without being really identified with them. Physical education has a lot to do with anatomy, physiology, pedagogics, psychology, sociology, etc., but it is not, properly speaking, any of them. It can be differentiated from them perfectly by its object. But can it equally be said that it has a homogeneous method, different from each one of them? This is much more difficult to assert; physical education shares physiological methods in physiological problems; in sociological problems and research, it uses a sociological method. Should we, in view of this, assert that it is not a science, or that it is not based on a specific science (kinanthropology)? The volume of its scientific subject-matter (corpus) is enormous. We would have to accept the suggestions of those philosophers of science who say that some of the criteria upon which the traditional theory of science is based should be revised. There may be interest in the suggestion that one could adequately accord the status of a science to any body of knowledge with its own object which, even if it cannot offer a strict methodology, presents an important and clearly defined fundamental scientific problem.

Human Movement in Educational Context

The characterization of man in movement as the distinctive mark of our science, and, consequently, as the starting point for our pedagogic action may seem a truism, and in a way, it is. There are, however, people who dispute it. Sometimes the most obvious truths need to be demonstrated. This clarification allows us to approach the many tasks confronting us, reply to the growing demands in our field, and understand the complex implications with a certain unity of criteria. The disparity of conditions under which physical education develops and grows in the world matters less when one has a common starting point and frame of reference that can be utilized in any restructuring and planning.

Man in movement can be considered on all levels, from the atomistic and the anatomico-physiological level, to the complete personality level, and even the socio - historico-cultural level. Kinanthropology must be alive to these diverse entities. Consequently, the applied educational angle of this science has an enormous range of possibilities of action and instruments for its utilization.

Concentrating now on the educational projection of our science—the practical side of physical education—we should remember the general scheme of problems in education:

1. What are the aims and objectives of education?
2. For what sort of social order are we to educate?

3. What is contained in education?
4. What are the methods and instruments for implementing such a content?

The answer to the first question rests on a philosophy of life. The answer to the second depends upon a socio-political conception. The third and fourth questions are corollaries of the first two.

Different and even contradictory philosophical and social ideas coincide in the belief that education helps the individual to develop his personal abilities and integrates him into society. We likewise agree that the importance of all this lies in the development and use of personal freedom.

If we therefore want to offer suitable suggestions for different philosophies of life or socio-political convictions, we must confine our thoughts to the universal facts and characteristics of our time. To help the individual confront these universal realities we must prepare him for later life—we must educate him.

Physical education, the applied science of kinanthropology, is the process of helping the individual properly to develop his personal potential and his possibilities of social relationships, with special reference to his physical capacities of movement and expression.

There is an increasing number of channels for physical expression which give new meaning to human physical movement.

The Human Consequences of Leisure and an Industrialized Society

In the first place, we refer to the advent of leisure. In the second place, we refer to the complex environment of an industrialized society which can be defined by such descriptive phrases as consumer society, mass society, standardized living, alienation.

Let us continue our reflections at a socio-anthropological level; from these reflections one may draw whatever scholastic conclusions one feels are suitable.

Leisure.—Let us define leisure, remembering that it is everything that is not:

1. one's professional occupation
2. obligatory work
3. occupations to supplement one's income
4. family responsibility
5. an unavoidable domestic occupation
6. a necessary act of self-preservation (food, sleep, personal cleanliness, etc.)
7. social or family ceremony established and accepted.

It seems as if the whole of life were contained in leisure! Indeed, practically all human activities can become leisure. But for them to do so, they must start from a certain attitude.

This leisured state of mind, which if it were not for the traditional pejorative implication, we should call idle, is what constitutes the content of the noun leisure.

In this century, the dictionaries are beginning to accept the modern active definition of leisure. Leisure may be the state of doing nothing or simply resting; it may also be any type of activity that is carried out with enjoyment as its purpose. It is this second type of leisure that is meant by the felicitous and suggestive expression, "the leisure society."

H. Kahn and A. J. Wiener, in their suggestive, and not at all capricious work, The Year 2000, make the following predictions for the year 2000 in post-industrial societies. There will be:

1. 7.5 working hours a day
2. 4 working days a week (3-day weekends)
3. 39 workweeks per year
4. 10 official holidays
5. 13 holiday weeks per year
6. 147 working days and 218 days of rest per year.

They also project that, in a society oriented towards leisure, time may be distributed in the following way:

40% of days in one's principal occupation
40% of days in a supplementary or leisure occupation
20% (i.e., more than 1 day a week) without any occupation, that is, simply resting.

"It would be possible to devote oneself to a supplementary occupation just as fully as to one's main job, and there would even be time to satisfy other ends."[1]

To these data must be added the reduction in one's working years through earlier retirement. With all this, man will come to spend approximately half his life in leisure, and the other half will be divided among years of study, apprenticeship, and working. Only a third of this time will consist of working days.

Not all sociologists agree with this prediction, but in general, the current trends are substantiating these predictions of increasing leisure.

New Role for the Physical Education Specialist.—In a time that is becoming increasingly sedentary, physical exercise can be seen as the great human reflex which restores the equilibrium. Within man's leisure occupations physical movement will be an increasingly urgent need, and consequently, a growing task and an increasingly important role for the physical education specialist.

Any concrete formulas to answer this need would be technical matters outside the scope of this study. Physical

[1] H. Kahn and A. J. Wiener, The Year 2000. A Framework For Speculation on the Next Thirty-Three Years. (New York: Macmillan Co., 1967).

education is primarily an educational task, therefore it has a lot to do with the school world. But if we observe its present structures in many countries, we shall see that one of the obstacles that most hinders its progress is its excessive status as a school subject. Physical education is not merely a school subject; it is one of the general aspects of education, and it gives its attention to the way man behaves in his first dialogue with the world—through his physical capacities within the coordinates of space and time. It was a great triumph to succeed in introducing the subject of physical education into the hyperintellectualized school curricula—especially within traditional Western culture. However, physical education has much more to offer, and it would be a pity to get bogged down in these achievements without being able to create new structures.

Physical education, without losing its highly important influence in schools, must give its attention to and inspire sociological achievements, such as holiday camps, young people's exchange visits, homes for the retired, clubs for leisure time, etc.

Problems in Industrialized Societies.—The descriptive phrases, such as industrialization, mechanization, mass society, standardization, etc., are highly symptomatic of our time and suggest a breadth of horizons for the new society. They open new perspectives and set up new structures. In the midst of all this is man who will not only reap the benefits, but also pay a price for it all.

For example, science and industrial efficiency have advanced enormously through specialization; but these advances have brought with them dangerous consequences for man, amongst which we must consider psychological mutilation. A worker tightens the same type of screw 1, 500 times a day. By the end of a month, he has tightened 40, 000 screws. If after work, he cannot recover from this repetition and mental narrowing by means of some type of cultural, imaginative, or physical activity, he will eventually end up psychologically crippled. Man needs activities that will bring into play the various normal forces of his personality—activities in which he has to think a little, and at the same time execute something that is not automated.

Linked with the concept of mass society is the psychological phenomenon of feeling a loss of individuality. The craftsman of yesterday, who manufactured his simple product from start to finish felt the psychological satisfaction of a job well done. However, he has been replaced by the worker in our industrialized world, who also works hard, but at the end finds himself deprived of the enjoyment of his own finished work.

Along with this depersonalization in the labor world comes standardization, even in one's enjoyment and entertainment. The powerful communications media have opened modes of entertainment to the masses, and generalized forms of

individual and collective expression are gradually replacing the old forms of popular expression, such as distinctive folk-dances characteristic of a particular social group. This trend may open up new channels of communication, but it leaves great gaps in personal and collective popular satisfaction.

These and other consequences must be studied and communicated to the educators who will prepare the man of the near future. They are the ones who will have to supply the new psychological elements that unforeseen wear and tear will make necessary. Educational systems suitable for "transitional" civilizations are not fully satisfactory for the cosmic man of the future—even if certain values remain basically suitable for all time. Educational structures which do not evolve are like dead organisms which eventually decay and become harmful.

Physical Eduçation and Sport

In our search for specific remedies for these conditions of human life, there arises a phenomenon of singular importance which we do not usually analyze with sufficient wonder—sport.

Sport runs right through contemporary life; it fills our cities on rest days, it polarizes the attention of those who like it and those who do not, and it floods the communications media. We live almost submerged in sport. This produces a logical reaction of criticism and rejection. Amid this passionate discussion of supporters and detractors, it is the physical educator's function to study the phenomenon, to clarify situations, and propose norms.

Physical education arose in the contemporary world as a natural derivation of gymnastic movements. These types of gymnastics, which consist fundamentally of the analytic study and practice of movement and postures, had developed independently of modern sport, which was about to spread internationally from its fundamentally British forms. It then occurred that sport, thanks to socio-anthropological factors, began to enjoy unprecedented success. This popularity was discovered by influential people outside the teaching profession who made their way into the managing ranks of national and international sport. For this reason, sport took unexpected directions with growing economic, political, and other implications. The physical education specialist—whom the general populace with accurate and subtle intuition, tended to identify with the phenomenon of sport—hastened to say that he had nothing to do with this sport that had grown out of all proportion. He was partly right; but involuntarily, physical education specialists drew away from the very activity that had the biggest following. A desire to reject contamination made them lose ground in the area where they could have found the greatest motivations for youth to practice physical education.

Today sport can be divided into two main aspects—the sporting spectacle, and the practice of a sport individually or in small groups. These are two disparate human realities and attitudes. But sociologically, one cannot be rigorously separated from the other.

It is dangerous, in a society which thrives on the spectacular and the sensational, radically to oppose spectacular sport as it is established in society. It may be argued over and spoken of disparagingly in many cases, but it is full of elemental popularity.

The Role of Sport in Preparing for the Future.—All these developments and controversies have prevented calm consideration of the values that sport involves—the very values we lack in contemporary society!

In every move of a game there is a creative aspect. Man can recover from the anonymity derived from mass production, through the practice of a sport, and gain the feeling of being an actor, a protagonist, even if only in the simplicity of the ephemeral sporting figure that he represents. Many attacks of anxiety and rebelliousness have accumulated as a result of the depersonalization of modern life. They are latent and ready to break out in cases of social maladjustment. However, psychoses may find a solution or compensation in the simple opportunity for individual participation offers by sport, a subject not generally remarked upon, but full of regenerative possibilities for the personality.

In order to combat passivity in a world of increasingly sterotyped physical patterns and increasingly standardized ideas, man needs a feeling of initiative. In the sports outing, in the match, or in any sport that has not become too technical, there exist enormous possibilities of exercising small, but powerful and refreshing initiatives.

These reflections are not intended to exalt sport as the educational panacea of our time. There are no panaceas, and all educational resources and values exist only in relation to their application, environment, and circumstances. But the success of contemporary sport must have been the consequence of something intrinsic that humanity intuitively (perhaps instinctively) discovered and took possession of. It is the job of the sociologist, the anthropologist, and the educator to analyze and discover these latent forces, bring them to consciousness, purify them, and consequently, plan objectives and tasks.

There have been confrontations between sport and physical education. Sport created its structures independently; its technicians grew up under its aegis, and were almost always alien to any educational vision. Physical education specialists logically claimed they had nothing to do with such technicians. Later, accepting the obvious, they incorporated sporting practice into their teachings, but they remained fundamentally apart from organized sport.

The principal suggestion I venture to offer is that the physical education specialist should strengthen his own convictions concerning the pedagogical value of sport, and in particular, the characteristics which make it especially suitable for the treatment of the man of our time. Consequently, the teaching structures of physical education and its plans of action should be more open to sport. But we should not forget that sport, as an abstraction of an important human reality, is but one exercise in the form of competitive play. The disproportionate spectacular displays, the great structures, the great championships, are derivations from that original human movement reality. Consequently, even if he believes the contrary, the physical education specialist is closely concerned with the spectacular sport which we incorrectly call noneducational.

Physical Education's Role for the Future.—Educators are interested in improving both man and society. Physical education has an interesting contribution to make to this task. Its proximity to the nature of man and to nature in general makes it specially suitable for the approaching hypertechnical future. There is no reason to be against technology, industrialization, and mechanization. The positive position is to search for the best possible human adaptation to this new world. Sociologists, naturalists, and political leaders unite to defend the environment in order to eliminate the pollution of the air and water. The physical education specialist may associate himself with these movements, but he has more specific tasks—to help man rediscover himself, and to recover the many values and echoes of his own nature through movement. This rediscovery process requires large doses of physical and mental health. Sport, dance, and exercise in general should, if possible, be in contact with age-old virgin nature. Movement is to technological man what freedom is to the bird after the cage. Sedentary living is the cancer of mechanized society. To eliminate a cancer, one must not destroy the whole organism, one must extirpate, purify, and supply the organism with specific energies. The specific energy to be supplied against a sedentary technological society is movement. The physical educator has an important task for the future. It would be a pity if, hindered by routine structures, he were not equal to the task.

Educational activity has a triple projection:

1. To have the pupil live the life one is aiming at while he is being educated.
2. To have that life pattern structure itself in behavioral habits for the future.
3. To instill in the pupil a mental conviction of the rightness of these habits.

If any of these three ingredients is missing, education is incomplete. If the first is missing, one commits the injustice of depriving the child or adolescent of the rights of his present life. If the second is missing, the education is short of operative

dynamism. If the third is missing, the operative unity of man is broken.

Physical education must make the pupil move, run, jump, throw, tackle, and dodge correctly—with proper coordination and well-structured exercises. However, it will not really be education if it does not inspire the pupil to act with fruition, delight, and zest. Only in this way will real habits be created for the future. The intelligent will understand that if man—a being who must move—does move, he will be doing something that is good and right.

For this reason, natural spontaneous movements, without artifice or oppressive stereotypes, are the most suitable to motivate a healthy, liberating, and refreshing physical education, fit for the times that are approaching.

Directions for the 1970s, Primary School Level

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Introduction

Let me discuss with you the advantages of using the term sport instead of physical education. There are several explanations for this change in terminology.

For research and science projects, the term physical education is only a subdivision of general education, but sport is much more, and includes aspects of all natural sciences—medical, anthropological, etc. It is an integrated discipline like social services and natural sciences. You will find the same explanation in "Sport Science" by Clark Whited. [1]

The term physical education is misunderstood; many people believe it only refers to the physical being. The physical education teacher tries to excuse this term and explains that he means 'the whole person!' But is all this misunderstanding and special explanation necessary?

The term sport includes all kinds of educational meanings and methods. The research in sport asks about motivation as well as about methods, and medical bases as well as philosophical bases. In our state we have changed the term for all preschool and school physical education to sport. All our

[1] Clark V. Whited, "Sport Science, the Modern Disciplinary Concept for Physical Education," JOPHER 42 (May 1971).

colleagues are now satisfied because those in mathematics or language no longer have to ask, 'Are we not educators?' Why is the term used only in physical education?

The term movement is not exact enough, it is more like a tone in music. Structured movement, however, is sport and may also be dance. Sport is directed toward quality as well as quantity of movement. Sport is now the term used for all kinds of competitive or recreation-directed movement. It is also creative, as is art or music.

Problems at the Primary Level

A famous writer, Ellen Key, called the twentieth century, "the century of the child." Educational reforms were created 50 years ago to encourage more child-directed teaching and to find new directions for a better understanding of child development. Now, in the last third of this century, we have to ask, "Is this really the century of the child?"

All learning processes are based on information which the child experiences as stimulations at the right time. What is the best learning situation for children from the day of birth to the primary school level? How do we consider our playground situations? Are they large enough? Do they have the appropriate play-stimulating equipment for free experience and running, climbing, swimming, playing, and throwing? How about the best leadership—especially at the elementary level? What highly-qualified guidance is necessary in this most important state of life?

We are writing the best books, delivering good speeches, preparing governmental aids and laws, and planning directions and programs with many idealistic proposals. But, look at the realities:

1. Primary school classes are overcrowded with 35 children or more. High school classes have fewer pupils in each class—why?
2. Primary school classes have insufficient equipment, inadequate space for sports, games, and swimming. High schools have better equipment—why?
3. Primary school teachers are often less qualified and receive less pay—which means that sometimes they carry more required hours than high school teachers —why?

At the level where best guidance methods are needed there are real restrictions and discriminations against young children who are not able to fight for better educational conditions as older students do! There are questions over questions.

DIRECTIONS FOR THE 1970s

Learning Situations

Directions for the 1970s in physical education at the primary level means first—more attention to and more understanding of motor behavior and sensori-motor, cognitive, and sensitive development, particularly in the first years of life—at the preschool and primary school levels. In addition, we must provide many individually-directed learning situations for early swimming, balancing, and ball games.

Robert N. Singer said, "In early childhood, there is a related development of motor patterns and intellectual skills and it appears that a child trained in basic motor movement does improve his intellectual achievement."[2]

I report from Marcel Gerber's research about the higher intellectual development of, "African children in the first year and the influence of maternal behavior," as shown by the Gesell test.[3] What is the reason? An African mother carries the child on her back during the first year, so it moves up, down, and around with the mother and improves its sensori-motor experience. Children from highly civilized countries are generally more restricted and do not have this early opportunity.

Dr. Koch from the Institute for Mother and Child in Prague has obtained surprising results from babies trained daily from the second week of life; they are able to climb and to grip successfully a cup and drink—self-acting at 4 months! They show free-balanced fine coordinated walking at 10 to 11 months and they are not bothered with balance and posture problems. Self-experience within the first 4 months is decisive for the sensori-motor and cognitive behavior of your child in the year 2000! We have to learn that the first days of life in the prone position, and the first months and years, are the fundamental bases for a child's motor coordination, intellectual, cognitive, and sensitive learning process development.

At the last meeting of the German Ministry of Education it was reported that about 50 percent of so-called retarded children are not really handicapped, but only retarded in intellectual, emotional, and sensori-motor behavior through a lack of interactions in early life. They could not experience enough moving, feeling, touching, and reacting in their preschool years.

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[2]R. N. Singer, Motor Learning and Human Performance (New York: Macmillan Co., 1968).

[3]Marcel Gerber, "The Psycho-motor Development of African Children in the First Year and the Influence of Maternal Behavior," Journal of Social Psychology. (1958).

What and How We Teach

More attention must be given to what and how we teach because motor learning is not only a process of repeating or imitating, it is also a process of systematic and progressively given stimulations, not only by inputs, but also by differentiated situative stimulations. The same principle applies to learning languages as well as learning motor techniques; at first children don't learn to spell, but to speak—they use familiar skills in play in new situations!

Strength, flexibility, endurance—these are only the premises, not the aims of sport activities. We should change our evaluation of fitness tests and train children in these necessary qualities only by whole sequences and by differentiated interactions, such as training muscle strength by climbing, endurance by running games, and flexibility by hanging and swinging.

Primary level children need thoroughly structured tasks where responses may be easily evaluated by the children themselves. In our new program we also advise the teacher that children should really know their own abilities and, perhaps, their disabilities. They should know how to evaluate themselves, maybe by writing their own self-testing books to motivate other primary school children to learn the right techniques.

We are now printing picture books and publishing the first reading book in sport with color pictures for first year primary school children. Now they can read and learn for themselves about ball games, swimming, skiing, and ice skating.

Sport not only means a collection of exercises, but also knowledge and understanding of early motor behavior. This requires a lot of observation from the teacher as to how children train themselves and how capable they are.

Look around the world—there are five-year-old skilled football artists in Brazil. Last year we saw the five-year-old tennis player in Australia. Skilled children play hockey in India, ride horses in Mexico, surfboard in Honolulu, and eight-year-olds win cartwheel championships in Dusseldorf. They have no posture-weakness!

Combine all these culturally dependent motor patterns and you will have the best international program for your first grades and primary levels. Plan a program with completely structured sports instead of boring tests or nondirected movement. Look at the highly skilled fire-limbo dancers in Jamaica, or the bara-tree climbers; these are the best tests for flexibility. Remember the see-saw jumping game in South Korea? It would be the best playground activity for coordination—and why not? Roller skating, bicycling, skiing, and ice skating can be taught in the first grade; the right learning age for all these sports is from five to seven years.

Swimming must be taught in kindergarten or even earlier. The Elementary School Physical Education Commission of the AAHPER Physical Education Division recommends, "When possible, the program should include aquatics."[4] Perhaps they should have said, 'teach your first grades swimming, diving at the right time.'

We need swimming pools for beginners. Perhaps parents could help build turngartens around the schools with various apparatus for free experiences in balancing and climbing, with lots of climbing trees with flexible elastic branches.

In the Zoo of Basel, creative architects have built fantastic flexible trees for the gorillas. Why could we not also use creative architects for our playgrounds instead of buying manufactured apparatus lacking in any sense for play!

Open research opportunities for architects to develop apparatus for sensori-motor situations for children of all ages. Architects or tree planters know that the whole building, the whole growing process, is based on the quality of the fundamentals. But in our school systems around the world these fundamentals are many times not taught by the best informed teachers.

Need for Specialists at Primary Level

It is essential that the best qualified teachers teach at the primary level! Therefore, we need some specialists—maybe only three different kinds of specialists for the first grade. But mathematics as well as language, music as well as sport or game skills need specialists. Even the most idealistic classroom teacher is not able to give appropriate fundamental instruction for every subject!

It is necessary to have the best qualified guides—more specialized teachers at the elementary level. Physical education is more than imitation. Children are able to understand what and why they are doing something, and are eager to learn facts. We must have insight into learning methods with time for reflection, understanding, and discussion. We need opportunities for observation, maybe by pictures in the classroom, slides, films, and audio-visual aids.

In sport we need (1) active training, (2) training by observation, and (3) mental training. This means concentration on certain points of difficulty in techniques—concentration for the real understanding of how to climb, throw, etc.

Let me explain that only by thoroughly understanding learning theories and teaching processes can we, as guides,

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[4]Elementary School Physical Education Commission of the AAHPER Physical Education Division, "Essentials of a Quality Elementary School Physical Education Program," JOPHER 42 (April 1971).

help the child to self-realization. Self-realization may begin with the first free creeping and free walking. It grows with all experiences, and leads through qualified guidance to open new levels of aspiration for the individual. We must open these levels!

The Need for Free Experience

We need more open doors for self-experience inside and outside primary school education—more helping than hindering. Let us fight against the misunderstanding of 'security' and against these wrongly directed laws of reliability!

I have learned that near Milwaukee they removed all climbing equipment from the playgrounds because of one or two accidents! In Japan, Switzerland, the United Kingdom, or Germany you will find just climbing-trees or ropes or bars for elementary school children. Open the doors and just reflect about the sensori-motor aims in balancing and climbing, and all the possibilities of coordination variations, as in ball-games using balls of varying weights and sizes. There must be a closed connection between coordination development, balance development, and intellectual learning processes.[5]

Children are not born clumsy; they are made clumsy by their lack of opportunity for self-experience. They are made insecure because they have never learned to take care of themselves, and have seldom learned to enable themselves. They have never learned to know their level of aspiration and to set up new goals and experiences. For these experiences, children need more space and better facilities than adults. Children need early and daily opportunities for their sensori-motor learning processes. It requires a timing factor to learn sport techniques early in all sorts of coordination and balancing sports!

Summary

The directions for the 1970s for primary school physical education should open the doors for:

1. better learning situations beginning with the first year of life
2. more attention to what and how we teach
3. best qualified guidance and specialized teachers
4. a new understanding of learning theories and the children's methods of self-experience and self-realization.

All this is not a question of finance. It is a challenge to ourselves as teachers. We must never be satisfied with our work because self-satisfaction is the end of progress. Let us progress.

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[5]A. H. Tomare and J. J. Gruber, Motor Aptitude and Intellectual Performance (Columbus, Ohio: Charles E. Merrill, 1967).

Teacher Preparation for the 1970s

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In the statement of the Educational Policies Commission, entitled, "Quality in Education," there appeared the following paragraph:

> The best education is that which does most to enable each student to develop his abilities and to serve society. Education must therefore be appropriate to the needs of each pupil and to the needs of society. But students are individuals, student bodies are constantly renewed, and society is ever-changing. It follows that education must be dynamic and diverse. High quality education implies never-ending adaptation and improvement. [1]

It follows that teachers of physical education must (1) understand the physical, intellectual, emotional, spiritual, and social needs of the developing pupil, and (2) have a basic knowledge of the dynamics of government, politics, the environment, and interactions among people.

Traditional professional preparation programs in physical education attempt to provide prospective teachers with knowledge about growth, maturation, and development by requiring them to take courses in anthropology, biology, psychology, and

[1] Educational Policies Commission, Quality in Education (Washington, D. C.: National Education Association, 1959).

other basic sciences. This type of program also hopes to acquaint them with social and political phenomena through courses in history, sociology, political science, and community development. Professional courses are added to these. The rational process has been utilized to try to solve all problems.

Recently this approach has been questioned. It has been found that personality factors can be just as important in teaching as knowledge of teaching techniques. Commitment and dedication to the profession and its purposes appear to be related to success in teaching. A concern for the intangible human dimensions of teaching has taken on greater significance. Deep involvement in the activities and aspirations of the pupils can be observed among the best physical education teachers. A sense of mission which manifests itself in enthusiasm, patience, and perseverance is characteristic of the master teacher. A willingness to listen and attempts to understand often elicit a corresponding attitude among pupils. A sincere desire to help and a willingness to give of oneself is usually present in those teachers who are most fondly remembered and who make the most lasting impression on their pupils.

Our teachers of physical education are often not prepared for the situations they must face and the environment in which they are called upon to teach. Our teachers are not prepared to work effectively in the crowded inner city schools. Our teachers do not seem to be able to cope with children who have grown up in the post-World War II television-oriented era. Our pupils are not reared on a philosophy of discipline, and traditional formal methods are no longer acceptable. Parents of today read about the perceptually handicapped and are disappointed when the teachers don't understand. Our children don't have the same concepts of freedom as we of the older generation. Students of today have learned how to be "individuals" and don't want "assembly line" education. Superintendents and principals wish to operate a school with "modular scheduling" and our physical education teachers don't know how it works.

We live in a period of challenge and change. Our technological revolution has made it necessary for our coaches and administrators to become familiar with synthetic playing surfaces, air-supported sports facilities, movable partitions, adjustable indoor courts, and entirely new forms of equipment.

Our social and ideological revolutions have forced us to face up to challenges to authority, new philosophical and religious concepts, the involvement of students in campus government, and modes of dress which at one time seemed entirely incongruous. The struggle between those who have and those who have not, our dissatisfaction with those who rule our countries, the sudden population increase, and the pollution of our lands and cities have added to the unrest, misunderstanding, and the frustrations in many sections of the world.

And yet, in the midst of turmoil and change, in spite of poverty and war, in the face of unrest and dissent, there is much to give us hope. Technology has, in many places, provided increased freedom from drudgery and economic stress, more opportunities to travel and explore, improved recreational facilities, better educational institutions, and more time for cultural pursuits. More important, however, are the changes we find in people. Many are devoting themselves unselfishly to the improvement of the human condition.

But so much for philosophical discussion. Let us talk about practical matters, and find ways to better prepare teachers for their task. Let us consider problems, issues, solutions, and practices. Some of these will be traditional and reoccurring; some will be new and the result of societal, technological, and philosophical changes.

Schools Without Walls

Speeches are made, articles are written, and books are published to tell us that we need to supplement traditional education with entirely different kinds of schools. Dr. David E. Sweet has recently been named President of the Minnesota Metropolitan State College Center which has been described as, "a college without walls." There will be no traditional campus, no classroom buildings, no boundaries. Factories, churches, laboratories, libraries, stores, streets, and parks will be the classrooms; lawyers, managers, doctors, businessmen, plumbers, pilots, builders, and professors will be the teachers. The community will be the campus and the universe, the environment.[2]

Can we prepare physical education teachers for such a school? Will they be working in parks, YMCAs, athletic clubs, or stadiums? Will they be leading groups on weekends into the mountains and down to the seashore? Will they be teaching physical education on the playgrounds and tennis courts of the city? At this moment, no one knows—but it is something to which we must give our attention. If we can, by these means, help educate those who would otherwise be deprived, certainly we should put our hand to the plow.

Auxiliary Personnel

Shall we encourage and use paraprofessionals in physical education? Will we find that they can do many of the things which are now being done by specialists, and do them well? Can we study the problem and utilize auxiliary personnel in such a way that highly trained leaders can give their thoughts

[2]"A College Without Walls," Springfield (Mass.) Sunday Republican, 4 July 1971.

and efforts to programming, providing for individual differences, interpreting to the public, and other long-needed tasks?

It is my contention that we must explore this possibility. Our top teachers and directors are spending too much time on trivial details. The judicious use of auxiliary personnel may be a partial answer to this problem.

Bowman and Klopf in their recent book, New Careers and Roles in the American School, have analyzed thoroughly this possibility and have laid down some rules for successful operation.[3] Among the important suggestions are: (1) team training of professionals and their auxiliaries, (2) careful orientation of all parties involved, (3) a coach-counselor-trainer-supervisor responsible for the auxiliary program, (4) the use of parents as auxiliaries, (5) a good in-service training program, and (6) emphasis on increasing personalized attention and assistance to pupils.

If this becomes a common trend, and it may, our professional preparation programs will need to give it much more attention than they have in the past. It can be a boon or a detriment, depending upon how we utilize auxiliary personnel.

Community Involvement

It is my contention that there has been too much separatism between schools and communities. Physical education is in a particularly good position to serve as a medium for more school-community cooperation. The program in Flint, Michigan is a good example. In that city a number of Community Service Directors are employed to conduct community programs from 3:30 P. M. to late in the evening. While physical education is only one of the activities in the program, most of the gymnasiums are used. A great many of the Community Service Directors are physical education majors who have expertise in this activity area.

If such programs are to make much headway, our professional preparation curricula must include some experiences in community service. Colleges may include course offerings where academic credit is given for student work in social agencies, churches, recreation centers, health agencies, and the like. A portion of the student teaching or field experience program may include community work. Students may be encouraged to work as volunteers in recreation centers, schools for the handicapped, and in special schools where no physical education teachers are provided. If credit is given, a formula based on hours served can easily be worked out. The college where I am employed has a two-hour-credit course of this kind for which 90 hours of work are required.

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[3]Garda W. Bowman and Gordon J. Klopf, New Careers and Roles in the American School (New York: Bank Street College of Education, 1971).

Physical Education in the Inner City

Generally speaking, students in the inner city of large metropolitan areas have the poorest physical education facilities, the largest classes, the least equipment per pupil, and the smallest per capita budgets. In the past, many colleges have not been sending student teachers to these locations because it was felt that they would get better experience in schools where more advantageous conditions prevailed. Graduates of many of our best teacher training institutions generally elected to do their student teaching in suburban areas or smaller communities where working and living conditions were better. It is also generally agreed that unless one has some experience in the inner city it is difficult to work successfully in that environment. It becomes apparent, then, that if the physical education in the inner city is to be improved, there must be a special effort to prepare teachers for such schools.

Knowledge of Perceptual-Motor Development

Scholars studying motor learning, growth, and development have known for some time about concepts like perception, neurobiotaxis, and nervous integration. They have been aware of the influence of movement on the completeness of nervous organization and organic development. It has been only recently that physical educators have realized that this is also their domain. Names such as Frostig, Piaget, Barsch, Getman, Delacato, and Kephart are only now becoming familiar to most students of physical education. And yet the theories of perceptual-motor development and the relationship of appropriate movement experiences to motor learning, reading, thinking, speaking, and self-realization are now bulwarks in our rationale for instituting and maintaining good programs of physical education and starting them at an early age.

Programs for the handicapped have always attracted attention and have always been able to elicit support. While the first consideration must be for the welfare of those with perceptual handicaps, it is certainly only common sense to use the favorable publicity to enhance the image of physical education in general.

Our prospective teachers should all include in their undergraduate programs and experiences courses and field work in which they learn about perceptual-motor development and education of those with perceptual-motor handicaps.

Flexibility in Teacher Preparation Programs

One of the current trends in professional preparation is to give prospective teachers greater leeway in their choice of courses. This is most generally accomplished by reducing the

number of general education requirements, by establishing a core of courses which all physical education majors should have, and then by giving students a choice of "tracks" or "sub-concentration areas" which they can follow. Such tracks might lead to emphasis on any one of the following.

Elementary school physical education
Secondary school physical education
Coaching
Physical education for colleges and universities
Psychological aspects of physical education
Sociology of sport
Exercise physiology
Administration of athletics
Corrective therapy and athletic training
Pre-physical therapy

This type of plan is not looked upon with favor by everyone. There are those who believe that, especially at the undergraduate level, teachers should prepare to teach physical education to elementary, junior high school, and senior high school pupils. Perhaps most of the leaders in professional preparation institutions favor keeping the undergraduate programs fairly rigid and broad and leaving the specialization for graduate education. There are, however, a number of fine institutions where subspecialization tracks are being instituted even at the undergraduate level.

At Springfield College we have reduced the all-college requirements and this has made it possible to specialize to a degree at the undergraduate level. Our basic undergraduate professional preparation program in physical education, however, is still fairly rigid in that we want those who graduate with a bachelors degree to be well-prepared to teach at the various levels.

Graduate Education

Perhaps the major issues in graduate education still revolve around the purposes of the various institutions. Some of the large universities insist that their principal function is to "push back the horizons" of knowledge, to "discover new knowledge," and to disseminate it. Other institutions, which are more concerned with preparing individuals for specific professions, see graduate work as being more practical and applied. We still find ourselves asking questions such as—could graduate study produce the skilled specialist or the educated man? Should graduate study be academic or professional in nature? Which is more important in graduate programs, research or practical course work?

In the United States, we are still involved in discussions about "physical education as a discipline," or "the body of knowledge" constituting physical education, and the significance of the various kinds of masters and doctors degrees.

It is my opinion that graduate work must be of high quality, and that some diversity among institutions makes for richer educational experiences.

What we are trying to do is produce intellectual leaders who understand the importance of total, well-rounded, integrated development and who will seek to assist and guide their pupils to that end. In so doing they will use a variety of means, methods, motivations, and activities and, hopefully, improve both the individual and society.

Traditional and Persistent Issues

I'm certain that we in the United States share with many of you problems which have been "bones of contention" and subjects of discussion in professional preparation conferences for a long time. Some of these are:

Subject Matter vs. Professional Education. —Some educators favor a liberal arts approach with an extreme emphasis on substance, subject matter, and general education. Other leaders use job analyses and competencies as their guides. Springfield College and many others try to maintain a ratio in the undergraduate program of approximately 50 percent general education (liberal arts) and 50 percent professional subjects.

Laboratory Experiences (student teaching, field work). — Opinions with regard to laboratory experiences vary from, "Students need a near of internship" to "Let them get their experience after they complete their bachelors degree." There is also a question as to whether the student teaching experience should be a full-time concentrated experience of 8 to 12 weeks or whether it should be spread over the four years. My feeling is that some observation and involvement with pupils should begin early in the college career and that there should also be a concentrated period of full-time field work lasting 10 to 12 weeks. I prefer to see this divided between secondary and elementary teaching. We are now also encouraging some experience in YMCAs and other community agencies.

Timing and Scheduling. Some institutions believe the first two years should be almost entirely pre-professional, general education while others feel it is better to start the professional work the freshman year. It seems to me that freshman students, because of their high motivation at this period, should begin their professional courses the first year and combine the professional and general education work throughout their college careers.

Activities (skills) Courses vs. Theory. —There is still considerable controversy among institutions which prepare teachers as to how much time shall be devoted to activities and how much credit shall be given. There are institutions where such courses are not considered "academically respectable" or where the time devoted to them is severely limited. At Springfield College our undergraduate program includes 16 credit

hours of professional skills and techniques courses out of the 136 credit hours required for graduation. As each credit hour is based on 45 contact hours in the gymnasium or on the athletic field, each major will have put in at least 720 hours in activity courses. About 23 different activities are covered.

Performance Contracting[4]

Let me mention one more experiment in education which we in physical education must watch. This is the performance contracting system. Big industry is moving into the classrooms of the nation. It claims to be making education more relevant and exciting. It pours more money into research and development than most educational institutions can afford. This is called "performance contracting" because industry is paid more if student learning surpasses agreed-upon goals. There is no pay, however, if these goals are not met.

Time, Inc., General Electric, IBM, Xerox, Westinghouse, Ford Motor, and Philco are some of the industries tackling this educational plan. Many educators, however, are questioning it. To a large extent, it consists of programmed learning. It appears to be great for "catch up work" and may greatly benefit deprived areas. It provides for individual differences; however, there is the question of dehumanizing education. The profit motive has incurred the disapproval of many. Learning for learning's sake is a thing of the past in this educational scheme. Pupils' needs and interests are not generally taken into account. Nothing has been done about extra-curricular activities, including physical education, up to this time. We must keep track of this new movement and see that this phase of development is not neglected. It could even be an opportunity for physical education, if these large industries can be convinced of its value.

Conclusion

I have tried to indicate some of the things which are happening in education and particularly in our field. With the continually accelerating rate of change in society, technology, and education we cannot accurately predict for the next decade. We can only be alert, flexible, and continue to learn. Perhaps the most important thing we can do to help our teachers is to emphasize and re-emphasize the need to learn, not only while we are in college, not only while we are in graduate school, but for the rest of our lives. For I believe these words, although I do not know when I first heard them, "Education is a journey, not a destination."

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[4]"Big Business Takes Over the Little Red School House," Springfield (Mass.) Daily News, 8 June 1971.

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HPER Directions of Research in the 1970s

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In my opinion, it is research, rather than diplomacy or politics which holds the key to promoting our field. Although I have been a researcher for about 20 years, I don't know all the different aspects of research related to health, physical education, recreation, and sport; I know only some, and I know some others through literature.

I think it is quite impossible to go with the same authority into the numerous different approaches of HPER—from the biochemistry of effort, to social anthropology, to the new computer data processing, and to the teacher in the gym.

But it is possible, and sometimes necessary, to have an overview of the field. I'll try to select for you the main trends of the research we are concerned with. I will try to relate my speech to the overall congress theme, and to present to the assembly a forward look into the directions research will take during the remainder of the decade—although I am not quite a futurologist. I can therefore only outline, in my rough English, the four or five main tendencies of research for the 1970s.

Let us start with a brief look backward. Looking through the files and my own abstracting services, I found that the research papers of the last 40 years could be divided into seven categories with the following approximate percentages:

1. Tests and measurements—Evaluation 30%
2. Analysis of specific skills and methods of teaching physical education 20%

3.	Biological sciences	20%
4.	Organization, administration, management	15%
5.	Psychology and sociology	7%
6.	Health education	5%
7.	Philosophy and history	3%

The most important tendency to appear in the last seven years, in Europe as well as in America, is the development of HPER as an acknowledged scientific discipline.

Even if we use the tools and means of biological and human sciences, we know now that we are concerned with human movement behavior and with approaches to the problems we have to study and solve.

As Bryant J. Cratey wrote:

> 1. Physical educators should be concerned mainly with that aspect of human behavior which is characterized by observable, purposeful, voluntary movement—movements which are task-centered and those which are reasonably complex.
> 2. Physical educators generally are called upon to teach healthy human beings, and thus should be familiar with all aspects of movement behavior which these individuals evidence.....
> 3. Movement behavior is worthy of investigation as a unit within itself and does not necessarily need to be related to various physiological anatomic processes which may accompany it.
>
> A comprehensive approach should be taken to the study of motor performance and learning. Study should be made of motor tasks measurable, not only in units of strength, but also in terms of spatial accuracy.
> 4. Concern should be directed toward the rather permanent change of movement behavior brought about through practice, i e. motor learning.
> 5. One should not ignore, but utilize to the best advantage, research in sociology, psychology, medicine, physiology, and other disciplines, to aid in gaining a thorough understanding of gross motor performance. [1]

The Molecular Approach. —Let us now take up the directions for research in the 1970s by the molecular approach. There has been increasing interest in cell modifications in the course of the training process. There are more and more researchers in the field of applied biochemistry who are studying the metabolite, ionic, and enzymatic responses to stress, as well as the aerobic and anaerobic mechanisms.

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[1] Bryant J. Cratey, Motor Behavior and Motor Learning (Philadelphia: Lea and Febriger, 1964).

The studies and knowledge of oxygen consumption and heart rate as an index of stress are strengthening. This side of our research will highly gain in accuracy.

The Psychological Approach. —At the same time, the psychological approach will win the greatest interest in most universities and colleges. Of course, psychology is defined as the science of behavior; we understand at once how much we have to gain from that side.

Here the subjects of research are already numerous—from the relatively simple research on perception and information feedback, we go to the study of the learning process, the effect of mental practice on the acquisition of gross motor skills, and the neuro-muscular patterning of skilled sportsmen, to the relationship between body image and movement performance. Also being studied are the influence of motivation in physical work capacity and performance, and the influence of physical education and recreation on mental health.

The real impact of this approach will be felt through its effect on the public at large, and through a new and different public conception of what is humanly possible and what is humanly desirable.

The cooperation between these two approaches will be advantageous. The resources offered by radiotelemetry will find their full use.

The Biomechanical and Anthropological Approaches. —Between these two approaches, we can insert the traditional physician's approaches—biomechanics and anthropology—the analysis of movement on the one hand, and the human evaluation of itself on the other hand.

Social anthropologists take as their subject the ways in which men have adapted the organization of their communities to the environment in which they live, and the ways in which men's ideas about themselves and their universe affect, and are affected by, the experience of making that universe appear a meaningful whole. One of the major interests of anthropology is the mutual interaction between man's inherent biological nature and the kind of social relationships he forms. Anthropological and social studies have long made it evident that the process of development or modernization of non-Western peoples must start with knowledge of their local and national cultures. Now it appears that, correspondingly, solutions to urban problems begin with the people in the cities and with their perceptions and social relations. In the world of today, sport is an aspect of universal culture.

It is more than likely that urban studies and those related to leisure activities, recreation, sport for all, and the contribution of sport and physical education to social and economic development will become the classical topic of social and anthropological analysis during the rest of the 20th century.

The Educational Approach.—Since 1970 was declared International Education Year by the United Nations, it would be only natural that a number of developments in the science of education had worldwide significance.

The conduct of research, especially in education, depends heavily on the free exchange of information among professionals in the same field. Progress can only be maximized if the exchange of information is not blocked by national boundaries. Apart from a few endeavors for systematic documentation, the circulation of information and data is limited to communications among scientists attending international meetings. The 1970s will see the formulation of plans for the establishment of a world information system, based on library automation and information retrieval. We hope that physical education will go in that direction, but with specific regard to the studies related to administration and management.

The goals of our research seemed, until now, to be related only to the personal interests of scientists. They are still largely disengaged from the critical problems of society. Our research can no longer pretend it is an independent activity directed by the inner dynamics of its own processes. We need to contribute directly to the solution of problems of national and social importance. The furtherance of research in our field depends largely upon public understanding of the role of HPER and its stature in society. If one reads a sample of current literature, as it appears in the newspapers, it soon becomes evident how little the nature and motives of HPER and sports are really understood. Why do governments and educators show so little interest in the research in our field, which is dedicated to the well-being of the average man?

Researchers ought to be forced to specify the impact their achievements will have upon the quality of life. They must be more anxious to excite the imagination, the curiosity, and the hope of a somewhat frightened society. What our research needs is a public relations man.

Nevertheless, there is an increasing tendency among scientists to think about environmental problems in global terms. Their preference includes a pluralistic approach to the formulation of goals and programs. They also know that only a government can afford the kind of large outlay that mobilizes a multidisciplinary team effort that can serve a broad public purpose.

The most sensitive parameter seems to be the background of the staff and task force members used to develop the data base and perform the initial impact analysis.

It has become all too clear that the relationship of research to human welfare, security, and freedom is far more complex than ever before. And above all, we need a philosophical choice concerning the direction of our society—that is no less than the future of mankind.

Directions in Physical Education and Recreation for the Handicapped

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Introduction

The past decade has seen a revolution in national and state attitudes toward the handicapped and retarded. Comprehensive community services have had a tremendous impact on the development of recreation and physical education programs for the handicapped. While recreation and physical education programs are still not being offered in many communities, the 1960s witnessed the birth of recreation for the handicapped as a distinct discipline.

In many communities today, recreation and physical education for the handicapped and retarded have emerged as essential services. Recently, Spencer Williams, the Coordinator of Mental Retardation Programs for the State of California Human Relations Agency, outlined services that were considered essential for these persons.[1] The list was to be used as a standard in measuring the adequacy of services available in a given community. Recreation was included as an essential service in the municipal departments, schools, social groups, clubs, YMCAs, and scouts, together with 16 other essential services, such as day care education, diagnosis, and training.

[1] Spencer Williams, MR Services (Sacramento: California State Office of Printing, 1969).

The new Developmental Disabilities Services and Facilities Instruction Act (Public Law 91-517) also lists recreation as a need.[2]

A few years ago, recreation was rarely mentioned as a necessary service for the retarded and handicapped. The current emphasis on the need for comprehensive services at the community level has helped greatly in the recognition of recreation as one of these important services. When five counties in California were asked to establish priorities in needed services for the handicapped, recreation and physical activities were listed as the greatest need. This survey was made in conjunction with the Lanterman Act, a California statute which provides for continuity of care and lifelong follow-up for these persons through regional centers.

Today, we even have a Declaration of General and Special Rights of the Mentally Retarded, which has been adopted by the International League of Societies for the Mentally Retarded, and which mentions the need for recreation. Article IV states that:

> The mentally retarded person has a right to live with his own family or with foster parents; to participate in all aspects of community life, and to be provided with appropriate leisure time activities.[3]

I visited a school for severely handicapped and retarded Navajo Indians on a remote reservation in Arizona. Here I learned that there is no word in the Navajo language for "handicapped" or "retarded." The closest word is "different"—they accept these children as part of a family unit. They are not ashamed of a child who is different, but they are afraid that the Anglos will take them away to an institution and they will never see them again. This would be their only reason for hiding them, which some of them have been forced to do. I think we could learn a great deal from the Navajos.

Fortunately, there is a current trend away from institutionalizing the severely handicapped and mentally retarded. Instead, there is more emphasis on placing these people in the community. This trend has stimulated the development of community-based services, including leisure time activities. It has also brought about an increasing interest in the need for and benefits of recreation for these persons. More and more recreation and physical education are being included in the spectrum of services needed at the community level.

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[2]Public Law 91-517, "Developmental Disabilities Services and Facilities Instruction Act," U. S. Statute 84-1316 (91st Congress, 2nd Session, 1971).

[3]President's Committee on Mental Retardation, "Declaration of General and Special Rights of the Mentally Retarded," in MR 69—Toward Progress: The Story of a Decade (Washington, D. C.: U. S. Government Printing Office, 1969), p. 30.

As we move into the 1970s, there are some obvious trends that are already having an impact on recreation and physical education for the handicapped. Before considering directions for the next decade, I would like to review briefly some of the current developments at the national level that have contributed to the initiation, promotion, and expansion of recreation and physical education, particularly at the community level.

STATE AND FEDERAL PARTICIPATION IN FUNDING

Various factors are already contributing to the development of recreation programs at the local level. The most significant factor is the federal participation with the states to provide funds for the development of programs at the community level. For example, funds are provided for time-limited grants and for the support of on-going services.

Training, Research, and Demonstration

The provision of federal funds for (1) demonstrating community recreation programs for the retarded, (2) training physical education and recreation personnel, and (3) research have also had an impact on the development of these programs. The passage of Public Law 90-170 (Amendments of 1967 Title V), The Training of Physical Education and Recreation Personnel for the Mentally Retarded and other Handicapped Children, was a milestone in the promotion of the total concept of recreation and physical education for the retarded and handicapped. This program, which is being implemented through the Bureau of Education for the Handicapped of the Department of Health, Education, and Welfare (HEW), provides for the advanced training of recreation and physical education specialists through support to colleges and universities. It also provides for research and demonstration projects in recreation and physical education. Training grants for physical education and recreation are being extended to 24 colleges and universities for 1971-1972.[4]

Some research in recreation has also been sponsored by the federal government. One example is the state-wide Mobile Recreation Program for the Mentally Retarded in Kentucky. This project is designed to train community agencies and mental retardation personnel in the development of recreation programs for the mentally retarded and handicapped.

The Division of Mental Retardation of HEW's Public Health Service has also awarded grants to a number of community recreation programs and day activities for mentally retarded children and adults.

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[4]"BEH Training Grants," Challenge 6 (May-June 1971), p. 11.

To date, more than 17 projects have initiated or expanded day activity centers for mentally retarded adults. Under this program, our center was awarded a federal grant for a demonstration, How Previously Institutionalized Retarded Can Be Integrated into Community Recreation Programs.[5] The program, which was inaugurated in June 1969, enrolled an additional 77 mentally retarded people who were on the center's waiting list for recreation. Most of these people are multihandicapped retarded, ranging from mildly to profoundly retarded, and in the age range of 20 to 60 years. Under the same division, a staffing grant was also awarded to the center to develop a physical fitness program for the 550 people enrolled. This program was initiated in July 1969.[6]

As a result of such research and demonstrations, the federal government has expanded its participation to provide funds for on-going programs. Day care and social rehabilitation funds are currently being provided for recreation programs on a 75 percent federal and 25 percent state or local formula.

Day Care Centers

The initiation of day care centers has helped greatly in the promotion of recreation for the handicapped and retarded at the community level. Some of these centers have been established by private agencies with federal day care funds covering Aid to Families with Dependent Children. Our center conducts such a program which emphasizes early infant stimulation and includes even crib-case children. The program is conducted through a contractual arrangement with the County Social Services Department which acts as the fiscal agent. Food, equipment, and supplies for the program are furnished by State Education Surplus Properties. These federal funds, provided through HEW Title IV of the Social Security Act, State Department of Social Welfare Program, provide 75 percent of the cost and, in California, require 25 percent local matching funds.

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[5] Janet Pomeroy, "A Demonstration of How the Mentally Retarded Who Have Been Previously Institutionalized Can Be Integrated into Community Recreation," Continuation Application for Health Services Project Grant (Submitted to: Division of Mental Retardation, Public Health Service, HEW, March 1970).

[6] Janet Pomeroy, "To Develop a Physical Fitness Program for Severely Handicapped and Mentally Retarded," Continuation Application for Staffing Grant (Submitted to: Division of Mental Retardation, Public Health Service, HEW, March 1970).

Day Activity and Social Development Centers for Adults

The recognition that recreation and social activity contribute greatly to the rehabilitation of the handicapped and mentally retarded has resulted in the establishment of day activity and independent living centers for persons over 18 years old. The initiation of these programs has pointed up the need for the inclusion of recreation and social development as essential parts of vocational preparation programs and independent community living for teens and adults. Like day care, these centers have been established by private agencies with federal funds from Social Rehabilitation for Aid to the Blind, Old Age Assistance, and Aid to the Totally Disabled of HEW, Title XIV. Like day care, the funding provides for 75 percent federal funds, to be matched by 25 percent local funds.

Our center provides such a program for 247 severely handicapped and mentally retarded persons, 18 years of age and older. The program is also conducted through a contractual arrangement with the County Social Services Department which serves as the fiscal agent. Public recreation and park departments, as well as private recreation agencies, are eligible for both day care and social rehabilitation funds which also include the cost of transportation. The fact that federal funds can be used to purchase day care and social rehabilitation services from public and private agencies on a contractual basis, is, in my opinion, the most significant discovery for permanent financing of recreation programs for the handicapped in a community setting. A minor requirement for eligibility for these funds is that agencies must be licensed by the Department of Public Health or some other designated agency. Programs providing 75 percent federal funds generate three dollars for every one dollar provided from local sources. Local funds may come from a variety of sources, such as foundations, individuals, or such public funds as subsidies from recreation and park departments. For example, the Recreation Center for the Handicapped used a $125,000 Recreation and Park Department subsidy to generate $375,000 more (a total of $500,000) to cover both Aid to Families with Dependent Children (day care) and Aid to Totally Disabled (social rehabilitation) programs. Recreation and park departments can use the "in-kind" principle and provide relevant materials, such as facilities, for matching funds. Some county welfare departments supply matching funds for agencies conducting these programs.[7]

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[7]Janet Pomeroy, "Financing Community Recreation Programs for the Handicapped and Retarded: Resources, Procedures, Services," mimeographed (San Francisco: Recreation Center for the Handicapped, Inc., 1971).

Funds are also available at the state level. In California, funds for the purchase of services, including recreation, are provided by the State Department of Public Health through regional centers for the mentally retarded, and by the State Department of Mental Hygiene through community mental health services. The former is 100 percent state financed, the latter is financed by a state-county formula.

Regional Centers for the Mentally Retarded

The present consensus that the retarded benefit greatly from a home atmosphere has led to the concept of a community center that provides the multidisciplinary services they require while allowing them to remain at home or in a foster home. In California, for example, the establishment of regional centers as an alternative to state hospital placement, has made it possible for families to receive lifetime diagnostic counseling, evaluation, and referral services near their homes.

The advent of these services has not only encouraged families to keep the severely handicapped and mentally retarded at home, but they have also made community placement possible for persons who have been institutionalized all their lives.

Community Mental Health Services.—In San Francisco, community group homes have been established by the State Department of Social Services to accommodate the constantly increasing numbers of mentally retarded who have returned to the community from state institutions. This sudden influx has created an urgent need for recreation programs at the community and neighborhood levels. Community mental health services have responded to this need by purchasing recreation services from our center on a contractual basis. To date, the center has served over 400 of these persons. We have graduated 111 into public recreation, and still have a waiting list of 73 previously institutionalized retarded and handicapped in need of recreation.

PROFESSIONAL CONTRIBUTIONS TO RECREATION AND PHYSICAL EDUCATION FOR THE HANDICAPPED

American Association for Health, Physical Education, and Recreation

Professional associations have made significant contributions to the promotion of community recreation and physical education for handicapped. In 1965, a National Task Force on Recreation and Physical Fitness for the retarded and handicapped, cosponsored by the Joseph P. Kennedy, Jr. Foundation and AΔHPER, was established to provide:

1. Leadership preparation
2. Research
3. Interpretation and program development
4. Consultive services.

This project has encouraged and stimulated the development of programs for the handicapped and retarded in communities around the nation through workshops, placement and staff services, surveys, publications, information services, legislation, public education, public relations, and by conducting national, state, and district conferences. More recently, the project broadened its scope to encompass all handicapping conditions, and the program has now become a permanent, Unit on Programs for the Handicapped under AAHPER. Among the project's significant achievements for 1970 to 1971 was an institute to, Develop Guidelines for Graduate Professional Preparation Programs in Physical Education and Recreation for the Handicapped. This was funded by the Bureau of Education of HEW.

National Recreation and Park Association

The National Recreation and Park Association (NRPA) has provided many years of consulting services on recreation for the ill and handicapped. In addition, it has published many materials on recreation for the handicapped, including an extensive bibliography, literature kit, and helpful articles in two monthly journals, Parks and Recreation Magazine and Communique.

The National Therapeutic Recreation Society (NTRS), a professional branch of the NRPA, includes a large number of standing and special committees concerned with such activities as legislation, conducting institutes, national and regional conferences, services for the aging, drug addiction, handicapped children and adults, research, community mental health programs and professional development, and standards and education of recreation therapists. The society also publishes a quarterly, Journal of Therapeutic Recreation, that features a wide variety of articles concerning recreation and physical education for the retarded and handicapped.

Recently, the American Parks and Recreation Society joined with the NTRS in adopting a resolution urging year-round public programs for the handicapped and employment of trained professionals in conducting such programs. The resolution was adopted by the national council of the NRPA. Other, more recent resolutions express the concern of the NTRS over the trend toward segregating programs and services for the handicapped, and the need for federal legislation which would make professionally-directed recreation agencies eligible for funds for establishing programs.

American Association on Mental Deficiency

The American Association on Mental Deficiency has organized a subsection to handle recreation and to help in planning, organizing, and conducting recreation and physical

education programs. It conducts research studies, conferences, institutes, and publishes the Journal on Mental Retardation which has frequent articles on recreation and physical education programs.

The Joseph P. Kennedy, Jr. Foundation

This foundation supports summer day camps; sponsors institutes, international symposiums, physical fitness clinics, the National Olympics for the Retarded, public information and relations; and works with universities and colleges in preparing personnel and contributing toward scholarships for students to work with the retarded.

Information Center—Recreation for the Handicapped, Little Grassy Facilities, Southern Illinois University

This center provides many recreation services for the handicapped, such as publishing the monthly ICRH Newsletter, providing kits on camping and physical fitness, and providing films on recreation and camping.

PUBLIC AND PRIVATE COMMUNITY RECREATION PROGRAMS FOR THE HANDICAPPED AND RETARDED

Municipal Recreation Departments

A review of community recreation programs indicates that, while interest in these services for the handicapped and retarded is increasing, at this time only a limited number of public recreation and park agencies have extended their services to include programs for the handicapped.

The consultant to the Recreational Research Institute of New York estimated that there are only between 400 and 500 community recreation programs in the United States being conducted for the handicapped and mentally retarded that are sponsored by public departments and voluntary agencies. Problems in conducting these programs were defined by professional consultants, researchers, and practitioners as follows:

1. Recreation departments have, in the past, never budgeted or planned for the handicapped.
2. Public recreation and voluntary agencies in the past lacked staff members with adequate training and experience in recreation for the handicapped.
3. Recreation departments are always geared to mass programs and gross statistical records needed for annual budgeting.
4. Programs for the handicapped were more costly because of the need for attention to individuals and small groups.

5. Architectural barriers existed everywhere in the community as well as in the recreation facilities.
6. Transportation was expensive, and in most instances was inappropriate or completely lacking.
7. Problems of accident and liability insurance.[8]

These problems are legitimate concerns for departments, but we believe that they can all be solved. In most instances, the solution lies with in-service education and demonstration programs, and especially in utilizing the federal and state funds now available for recreation and transportation.

Selected Examples of Municipal Programs

San Francisco.—A special services for handicapped division is a new concept in providing recreation for the mentally retarded and handicapped in municipal departments. An example of this is the San Francisco Recreation and Park Department which employs two full-time staff members. Programs for the mentally retarded and handicapped are conducted at three community centers where approximately 300 are participating. Recreation leaders and playground directors from the department conduct weekly programs. An advisory council consisting of representatives from voluntary public and private health, education, recreation, and welfare agencies assists the staff in coordinating services, public information, and education; recommending recreation programs; conducting conferences; and studying needs.

Another unique concept which has also been instituted by the San Francisco department, is the purchase of recreation services on a contractual basis from a private recreation agency. This department purchases these services from our center for severely handicapped and mentally retarded who are unable to participate in regular programs with the nonhandicapped. Several other departments in California and around the nation have programs similar to that of San Francisco.

Washington, D. C.[9]—An outstanding municipal recreation program for the mentally retarded which could certainly serve as a model for other communities is found in Washington, D. C.

This program was initiated in 1962 with a summer day camp funded by the Kennedy Foundation and service clubs. A

[8]Morton Thompson, "The Status of Recreation for the Handicapped as Related to Community and Voluntary Agencies," in Proceedings of (Study) Conference on Research and Demonstration Needs (Washington, D.C.: AAHPER, NRPA, Bureau of Education, 1969): 27.

[9]William Hillman, Jr. and Helen Jo Mitchell, "The Municipal Recreation Department and Recreation Services for the Mentally Retarded," Therapeutic Recreation Journal 3 (1969): 32-35.

survey to determine the number of mentally retarded in the District of Columbia disclosed that there were 7,000, out of a total population of approximately 764,000. A director-coordinator of mental retardation programs was ultimately employed by the department to assume overall responsibility for program development and staff training. In 1965 the budget request for recreation for the retarded was approved by Congress. Since then, the department's program has developed as follows:

1. It now has an enrollment of 450 people between the ages of 4 and 37. Approximately 65 percent are severely retarded; 20 percent, mildly retarded; and 15 percent, profoundly retarded.
2. Recreation programs are conducted six days a week throughout the six centers. Three summer day camps are conducted for eight weeks.
3. Programs are primarily of the sheltered type, but participants are encouraged to become involved in nonsheltered programs. Activities include arts and crafts, music, dance, self-help skills, bowling, modified games and sports, and trips into the community.
4. A staff of 46 full-time recreation personnel, plus additional summer staff, conducts the program with the help of many volunteers, primarily from high schools and universities. The staff is guided by an advisory committee of professionals in the field of recreation and mental retardation services.
5. Transportation is provided by the department, and utilizes five buses and five full-time drivers.
6. The programs are financed through the allocation of funds from the department, local service clubs, community organizations, parents' clubs, and individual citizens.

Problems of Leaders and Training.—One of the problems mentioned in conducting municipal recreation programs for the retarded and handicapped was the lack of adequately trained staff. Most departments operating programs for the retarded are using their regular personnel and conducting in-service education programs to prepare them to work with these persons.

Experience at our center reveals that the most successful leaders in community recreation for the retarded and handicapped have been those who have worked in municipal recreation programs with the nonhandicapped, and have professional training and background in general community recreation. Recently, we have discovered that the trend toward comprehensive planning for community-based services for the retarded requires a great deal of expertise in community organization and in working with such people as doctors, therapists, and parents.

The trend away from institutionalizing the retarded and severely handicapped in favor of community placement also has implications for the therapeutic recreation professional whose training is designed for working in hospitals and treatment centers with the ill and disabled.

Transportation. —The need for transportation, which emerged as one of the major problems in establishing recreation programs, is also being solved by some municipal agencies. While some departments, such as the one in Washington, D. C., are providing financial assistance for this service, most of the transportation available for programs conducted by municipal departments is provided by cooperative agencies. The current provision of federal funding for programs which include transportation should alleviate some of the problems.

Since its inception, our center has found it essential to own and operate its own buses for participants unable to use public transportation. At present we have 10 buses and 16 drivers for day and evening shifts.

Architectural Barriers. —Today, even architectural barriers are being eliminated through the enactment of legislation. All new public buildings constructed with federal funds for public use must be designed to accommodate the handicapped and elderly.

Some communities are also demonstrating that even the most severely physically handicapped people, including the bedfast, can use regular recreation and park facilities. If adaptations are made, they are usually minor.

School Recreation Programs

While physical education programs are being conducted in many schools for the handicapped, school recreation programs for the retarded and handicapped appear to be somewhat lacking. This is particularly true in California, where there are little, if any, day or after-school recreation programs provided by the Department of Education. In some instances, children are picked up at school by private agencies and taken to recreation programs and swimming pools. Currently, a community advisory council to the San Francisco Recreation and Park Department is working to encourage schools for the retarded and handicapped to use the over-ride tax, which is appropriated for recreation, to conduct day and/or after-school programs for these children. The committee is also exploring methods at the state level to convert compulsory summer school programs for the handicapped into camping and recreation programs which are felt to be much more beneficial.

From our experience, it appears that special education teachers and administrators are becoming increasingly aware of the benefits of recreation activities. In lesson plans they

are scheduling some recreation goals and objectives, realizing that some children cannot be reached through academic subjects.

Voluntary Health and Welfare Agencies

Voluntary agencies associated with the mentally retarded and handicapped have initiated and conducted most of the community recreation and camping programs that have been established.

In the early 1950s, National Aid to Retarded Children (NARC) was the major agency in providing recreation and camping programs for the mentally retarded. Currently, NARC sponsors over 250 day camps and 200 residential camps in addition to other recreational activities. One of NARC's goals is to work with local public and private recreation agencies to include the retarded in community recreation programs.

Private Recreation Agencies

There seems to be an increase in the establishment of private recreation agencies for the handicapped. In terms of flexibility, private recreation agencies frequently have many advantages in comparison with municipal agencies. While our own agency, for example, has worked closely with the San Francisco department for 19 years, it has had considerably more freedom to pioneer the many aspects of operating community recreation programs.

Boy Scouts and Girl Scouts have for many years conducted community recreation and camping programs for the mentally retarded and handicapped. Large numbers of these boys and girls belong to scout units in various communities throughout the nation. Scouting handbooks for the mentally retarded have been published by these associations, and National Jamborees are held for handicapped Boy Scouts.

The YMCAs.—Some of the YMCAs are also active in providing recreation programs, particularly in swimming and camping, for the mentally retarded and handicapped. An outstanding program in swimming for the mentally retarded has been developed by the Longview, Washington, YMCA. Workshops and in-service training programs are being conducted in physical activities and recreation for the retarded and handicapped.

In California, a YMCA camp and its staff combined with our center staff to conduct a very successful resident camping program for severely handicapped and profoundly retarded, including bedfast persons. The only adaptation required in the use of the camp facility was the installation of one ramp for wheelchairs for one cabin.

Highlights of Innovative Programs in the United States, as reported by Dr. Julian Stein, Director of Unit Programs for the Handicapped, AAHPER[10]

Hamilton, Ohio. —Mentally retarded students developed a complete outdoor education facility including a bicycle trail, two dams, totem poles, council rings, BB-rifle shooting range, archery range, walking trails, all purpose areas, and a pitch and putt golf course. This facility is now used by all school children and people in the community.

Camp Confidence. —Camp Confidence is a portion of the Northern Minnesota Therapeutic Camp and is connected with Minnesota's Brainerd State Hospital. The program is conducted throughout the year with appropriate activities according to the season. A great deal of winter programming has shown what these groups can do in such activities as snow mobiling, skiing, tobogganning, ice fishing, and snow sculpture.

Partlow State Hospital (Alabama). —Partlow State Hospital has an exhibition tumbling/gymnastics team that consists of trainable and below retarded youngsters who put on demonstrations throughout the state. They were one of the real show-stoppers in a special clinic of the President's Council on Physical Fitness and Sports. Maximum IQ of the group is about 35.

Wilderness Camping. —There are many examples of groups participating in various kinds of wilderness camping experiences including canoeing, mountain climbing, and truly out in the woods camping where privvys had to be dug. These programs are being conducted with retarded and handicapped people of all ages, abilities, and descriptions.

Fitness Testing. —Increasingly, retarded youngsters who have the benefit of an appropriate physical education program are performing various fitness test items at levels comensurate with nonretarded populations. The specific nature of motor activity and learning is being shown more and more. An individual who is strong in one area may be weak in another and vice versa. Little transfer occurs between gross and fine motor activities, gross and other gross motor acts, and among various fine motor activities.

Homebound Recreation Program. —In San Francisco our newest program is a mobile service to bring recreation specialists into the homes of the severely retarded and handicapped. The program serves 159 physically handicapped and mentally retarded children and adults who are too severely disabled to take part in programs conducted at the center's facilities.

[10]From personal correspondence with Dr. Julian U. Stein. More information on the following programs can be obtained by writing to: Unit Programs for the Handicapped, AAHPER, 1201 16th Street, N. W., Washington, D. C. 20036.

This program originated as a result of the center's waiting list of severely retarded and handicapped individuals in all age brackets. Adults, particularly the elderly, are in special need of this kind of help to overcome the isolation that results from being homebound for long periods of time. Many of those being served by the mobile program are severely handicapped teenagers and adults who have returned from state institutions to foster care homes in the community. The range of activities in the homebound program includes table games, sewing, arts and crafts, music and drama, and physical exercise. A bus transports those ready for brief periods of outdoor activity and contact with other homebound individuals.

Adult Education Instructors at the Recreation Center for the Handicapped, San Francisco, California. —Another innovation is the use of adult education instructors from community colleges. Currently, six persons working 20 hours a week conduct classes in in-service training for staff and parent education. Activities for the handicapped and retarded include health education, political science, journalism, music, and drama.

PROJECTIONS

Some Philosophical Views

It is enlightening to review some of the current developments. However, it is even more challenging to try to predict what effect some of the current trends will have on programs, leadership, facilities, transportation, and financing in the future. The trend away from institutionalization and medical treatment in favor of rehabilitative training in the community for the handicapped and retarded will, I believe, have a great impact on recreation and physical education for these persons.

In an article, "Twenty Predictions about the Future of Residential Services in Mental Retardation," the author states:

> The concept of the "institution" will disappear; instead, a broader concept of "residential service" will take its place... affording intimate contact with ordinary citizens and ordinary community resources... In the future, residences will increasingly be viewed as places in which to sleep, eat two meals, and do some of one's living. Children in residences will go to public community schools; community physicians, clinics, and hospitals will attend to medical problems; work training and placement will be in schools, sheltered workshops, and/or business establishments in the community. Swimming, bowling, dancing, movies, and such will all be shared with the nonretarded in the community; shopping will be

in ordinary community stores and shopping centers rather than in canteens.[11]

The Principle of Normalization which is generally accepted as a sound basis for residential care for the retarded and handicapped, also embraces this concept. The Principle of Normalization is the much-praised Scandinavian retardation program which states:

> The Normalization Principle means making available to the mentally retarded, pattern and conditions of everyday life which are as close as possible to the norms and patterns of mainstreams of society.[12]

Hostels in the community provide homelike surroundings and normal rhythms of life and participation in activities. To create a homelike atmosphere in cottage-type facilities many things are needed, such as rugs, drapes, lamps, sofas, private bathrooms, and small dining areas, with private or semiprivate bedrooms. It is my understanding that through normalization legislation the Scandinavian countries have done away with state institutions for the handicapped and retarded.

As larger numbers of these individuals remain closer to home, more retarded and handicapped individuals will become the responsibility of public schools and community recreation departments. Increasing emphasis and attention will be given to public education and public relations regarding programs for the retarded and handicapped. Recreation and physical activity programs will provide an excellent base for these efforts to reach the general public.

Along with these concepts, I believe that the provision of recreation for the retarded and handicapped will ultimately be recognized by all communities as an essential part of comprehensive services. It will be considered:

1. A need and a right of handicapped and retarded persons as citizens and as taxpayers of the community
2. A very important segment in the total growth and development of the retarded and handicapped. Recreation programs can help these people learn self-help skills, socialization, physical development, and improvement—prerequisites for school and vocational training and placement. For example, during the past six years, our center has served approximately 575 multihandicapped children who were not

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[11] Wolf Wolfensberger, "Twenty Predictions about the Future of Residential Services in Mental Retardation," Mental Retardation 4 (Dec. 1969): 51-52.

[12] Philip Roos, "Normalization, De-Humanization, and Conditioning—Conflict or Harmony?" Mental Retardation 5 (August 1970): 12-14).

accepted in any school. To date, 350 of these children have improved sufficiently to be accepted in city schools for the retarded, or in special classes in regular schools. In some dramatic instances, a few were enrolled in regular classes in regular schools.

The provision of comprehensive services for the handicapped and the retarded at the state and community level will focus on the total person, rather than on the handicap.

Many voluntary agencies have specialized in certain types of handicaps to bring attention to the needs of these groups. They must now let go and join with other agencies to facilitate comprehensive planning for the total person. State comprehensive planning, where legislation has provided funding for all types of handicapped and retarded, will force agencies to plan and work together for a continuum of services. This will help eliminate the overlap of services and fund-raising and the gaps in services created by agencies with vested interests who are afraid of losing their identity and causes.

Some state departments of education are also moving in the direction of noncategorizing in schools and in teacher training and preparation. These states include Texas, South Carolina, Hawaii, Maryland, and Virginia.

Organization of Programs

In organizing community recreation programs for the mentally retarded and handicapped, emphasis will continue to be placed upon the need for public-private partnership. It is believed that recreation leaders, public and private agencies, and administrators particularly, will begin to develop a broader concept of recreation and its use and importance in the educative process of the retarded and handicapped. Administrative policies will be more flexible in programming for the handicapped and mentally retarded. For example:

1. A more flexible policy for enrollment will include the multihandicapped, with the realization that even the multihandicapped retarded have basically the same needs as all others and can participate in and benefit from all types of recreation activities in the community. They can also use the regular facilities available to everyone else.
2. Mobile recreation for homebound handicapped will fulfill the need for satellite programs by using neighborhood facilities such as churches, social halls, and group homes.
3. Some community recreation programs for the retarded will have to be concerned with nutrition and the necessity for providing some food. At our center, the staff discovered that the preschool children's erratic behavior in the morning was caused more

from hunger than from emotional disturbance or other conditions. Most of them had not had breakfast. Now they are given breakfast upon arrival at 9:00 A. M., a hot lunch at 12:30 P. M., and a snack before leaving for home at 3:00 P. M.

4. Community recreation leaders and administrators will have to recognize the need to work more closely with medical and para-medical teams. They must develop a feeling of security in the area of recreation, and its importance and uniqueness in the total development of the retarded.

Leadership

It is predicted that recreation and physical education for the handicapped will gain momentum as a career, particularly for young people who want to be creative and make positive contributions to our communities.

During our 19 years of operation, our center has inspired and encouraged hundreds of young people to enter the field of recreation, physical education, and related fields for the handicapped. Many who wanted to work with the handicapped had never heard of recreation as a career. Some have changed their majors for professional training in recreation or physical education. High school and junior college students serving as volunteers at the center have found direction in a variety of fields related to the handicapped. Dozens of field-work students and former staff have moved on to other communities to start similar programs.

Professional preparation programs in recreation and physical education will emphasize more practical field work and closer relationships between theory and practice. Programs will be designed to individualize instruction according to student needs, background, experience, and goals.

Research will become more action-oriented with projects being done in on-going programs. Less emphasis will be placed upon basic and theoretical types of research so that results can be used and applied directly in programs.

New leaders working in recreation for the handicapped will look at the whole person, not only his medical or emotional problem. They will find his ability and potential to participate successfully in recreation with either the handicapped or non-handicapped. George W. Albee, who has been quoted frequently as a result of his stimulating article, "Needed—A Revolution in Caring for the Retarded," states that the retarded need teachers more than they need doctors, and that:

> Teachers with the right attitudes and expectations are of critical importance—and can have a significant effect on the development of the child's capacity to its fullest... Too often we approach the task of teaching the retarded

children with the expectation that they will not or cannot learn. We have not begun to tap much of the potential of these children, a potential that might be unlocked not only with new techniques but with new expectations...[13]

Agencies conducting recreation programs for the retarded will challenge youth as they have never been challenged; they will have high standards for leaders and will expect much. In addition to the professional qualifications required, leaders will have to possess certain attitudes and attributes which are considered essential in creative recreation leadership. In working with hundreds of recreation and physical education leaders during the past 19 years, our agency considers the following qualities as essential, in this order:

1. Emotional stability and maturity
2. Physical stamina and energy
3. Ingenuity, resourcefulness, creativity, and flexibility
4. Exceptional patience, understanding, and tact
5. A strong commitment to health, physical education, and recreation as integral parts of the total educative process
6. A willingness to experiment or pioneer with new activities, attitudes, and approaches
7. A willingness to do custodial tasks, such as feeding, lifting, toileting, ahd handling wheelchairs, beds, and cots.

The trend toward comprehensive planning for a continuum of community services will require community recreation leaders and administrators to have a great deal more training and experience in community organization. This should be required at the undergraduate as well as the graduate level.

Types of Programs

In all recreation programs for the handicapped and retarded we will be concerned with the whole person and how he can be totally involved in the community. In focusing on the individual, opportunities will be provided for the retarded to participate with the nonretarded in those activities in which he is successful.

Both separated and integrated programs for the retarded will continue to be needed—with emphasis on ultimately integrating the retarded with the nonretarded in all community recreation programs.

In program planning, normal children or adults will be used as a frame of reference. This assumes that even the most profoundly retarded can benefit from, and should be able to use, all recreation and community resources available to

[13]George W. Albee, "Needed, A Revolution in Caring for the Retarded," Trans-action 5 (Jan.-Feb. 1967): 37-42.

other children and adults. In line with this concept, our staff takes the children and adults to public parks, playgrounds, museums, airports, concerts, theaters, restaurants, and shipping centers so that they can participate with normal persons. The mildly or moderately retarded have also been taken on cable car, bus, and elevator rides, on snow trips at Squaw Valley where they spent their first night away from home, and on trips to a farm and wilderness camping in the High Sierras. Adults have taken trips to Las Vegas where they enjoyed the night spots and gambling.

Emphasis will be placed upon the need for new methods, approaches, and techniques for stimulating and motivating the handicapped and retarded, particularly those who have been previously isolated in institutions, or for children who have been kept in their cribs from 8 to 10 years. Examples of some of the practical approaches we have found to be important are:

1. The staff is not afraid of hurting a child by conducting rough and tumble activities on indoor mats or on grassy outdoor areas. Even bedfast children are given the opportunity to ride piggy-back and to wrestle on the floor or in the grass with the leaders. Children who have been confined to their cribs most of their lives have learned to sit up and to stand and to walk when muscles were gradually strengthened in physical activities such as these.
2. A new concept is called compatibility grouping. Grouping is achieved primarily by chronological age. Within one group will be many types of multihandicapped. For example, children and adults who have the same type of handicap, such as cerebral palsy, are not grouped according to handicap, but by chronological age, compatibility, social level, and individual need.[14]
3. The handicapped and retarded learn more by being actively involved. For example, when a child squeezes water out of a sponge, or uses an egg beater in soap suds in kitchen utensil play, he develops a longer attention span and gains self-confidence and self-esteem by mastering manipulation of the materials.[15]
4. The staff is aware that through sensory experiences a lot of learning takes place; therefore, sensory experiences are not taught, but lived daily. Children and adults learn the smells and tastes of foods. On nature walks to the camp site, beach, and zoological gardens, they are given many opportunities for living

[14]Rochelle Myers, "Compatability Grouping," Challenge 3 (Sept. 1968): 6-9.

[15]Rochelle Myers, "Egg Beaters, Corn Meal and Recreation," Challenge 2 (March 1967): 8-9.

sensory experiences,.. During the sound, feel, smell, and sight walks, they are encouraged to identify the sound of a squirrel, a bird, or waves on the ocean. They feel a pinecone, a rock, or a shell, and smell the salt air of the ocean, burning wood, or the fragrance of a wild flower.

Some of the practical learning experiences enjoyed most by previously institutionalized retarded are:

1. Trips to the zoo, where they learn to identify animals.
2. Walks through neighborhoods, where they see different types of houses, flowers, trees, shopping centers, lunch counters, automobiles, and a nursery.
3. Learning to use public transportation, recognizing the number of a bus (after they've learned to read).
4. Home-making skills such as cooking, sewing, identifying cooking utensils, table setting, proper manners while dining, and proper use of knives, forks, etc.
5. Health education, i.e. personal grooming, make-up, hair styling, proper clothing. Men have learned how to shave, comb their hair, brush their teeth, and shine their shoes.
6. Learning to read and write, count, tell time, and talk on the telephone.
7. Developing hobbies that can be enjoyed at home, such as card games, knitting, crocheting, scrap books, and leather craft.
8. Physical fitness, such as learning to swim, run, and jump, or taking part in Special Olympics in the local community.
9. Cultural activities, such as learning the culture of a country.
10. Drama and theater. Plays and productions can be presented in the community. "The Little Prince," was performed by our teenagers at San Francisco City College and San Francisco State College for special education and recreation majors, other students, and for retarded and handicapped students in local schools. The cast consisted of blind, severely retarded, emotionally disturbed, and physically handicapped nonretarded.
11. Service projects such as making items for Children's Hospital, or making trays, planting succulents, or making pottery items for a home for the elderly.

Facilities, Equipment, and Supplies

All facilities, as well as equipment and supplies, can be adapted for use in recreation programs for the retarded and handicapped. Persons working with even the severely multi-handicapped retarded will eventually realize that it is not

special facilities we need, but more people. With help, even bedfast persons can participate in any community recreation program utilizing regular facilities. A bedfast person can swing, slide down a slide, or ride a horse if he is held by another person. Special playground equipment is not needed.

Financing

One of the most significant acts of legislation that should greatly enhance the provision of recreation and physical education is the Developmental Disabilities Services and Facilities Construction Act (Public Law 91-517).[16]

It appears that this act will include all handicaps. The most significant part requires that the funds must be used to supplement, expand, and enrich programs and cannot be used to replace the current level of funding.

The act provides for developing and implementing a comprehensive plan, service, construction of facilities, training of specialized personnel, demonstration of improved techniques of services, and training grants. The term 'service' means specialized services directed toward the alleviation of a developmental disability or toward social, personal, physical, or economic habilitation of such a person. Recreation and transportation are mentioned among many other services provided. For the fiscal year ending June 30, 1972, $105 million has been appropriated; for fiscal year 1973, $130 million has been appropriated. Our center has received construction funds for a new building under the former act (Public Law 88-164), and we expect to break ground in October of this year.

It is expected that more financial assistance will be available from:

1. Municipal recreation departments, through the allocation of their own funds or through contractual services with private agencies
2. Schools for handicapped
3. Voluntary agencies dealing with the handicapped
4. United Crusades
5. Foundations, service clubs, fraternal organizations, and other private groups.

Transportation[17]

Every community will have to solve the problem of transportation and insurance, particularly for the severely handicapped and retarded unable to use public transportation. This

[16] Public Law 91-517, "Developmental Disabilities Services." (op. cit.)

[17] Janet Pomeroy, Recreation for the Physically Handicapped (New York: Macmillan Co., 1964), pp. 128-137.

can be done partly through public-private partnership and partly through federal funds covering transportation.

CONCLUSIONS

It is my firm belief that:

1. Enough studies have been made
2. Enough programs have been pioneered
3. There are sufficient models, demonstrations, philosophical concepts, guidelines, financial resources, facilities, and leadership for starting and/or expanding recreation and physical education programs for the handicapped and retarded. It is also my strong belief that every community has the potential for initiating and conducting these programs. We have to be bold, courageous, and have the tenacity to act rather than talk.

We must move away from the stage where recreators talk to recreators, physical educators talk to physical educators, social workers talk to social workers, and doctors talk to doctors. Let's talk to each other—to those in all disciplines and services relating to the handicapped and retarded, and above all, to the citizen in the community. The need of the handicapped for recreation and physical education is a concern in which everyone has a stake.

New Developments in Preprimary and Primary Education

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One of this century's new ideas is that the very young child can, and in many cases, must learn outside the home. For many years, people who have cared about and have studied the behavior of the child have stressed the importance of the early years in setting the patterns of a lifetime. But it is only recently that the nursery school movement has accelerated and educators have begun thinking in terms of early childhood education for all who can benefit.

This movement toward preprimary education has been and is continuing to be encouraged by (1) the need for women to work outside the home, (2) the concentration of population in large cities, and (3) the innovative, experimental climate of our technological times. These and other factors have created the need throughout the world for public nursery schools and day care centers—in short, appropriate environments for the very young child to live in and thus to learn in—according to the cultural goals of the country.

My pleasure today is to report on new developments in preprimary and primary education in our country. I will, of course, emphasize the contributions that physical education and dance are making to the total status of our early childhood and elementary school education. At this point, you will be interested to know about the foremost recommendation at the December 1970 White House Conference on Children. The

conferees said that their first concern was "the need for comprehensive family-oriented child development programs, including health services, day care, and early childhood education." This Conference is held every 10 years. Thus, recommendations become long-term directives for the future of children. You can see, then, that the priority given the recommendation for early childhood education means a great deal to us who are working to get educationally sound programs for all children. At this moment, major pieces of legislation affecting early childhood education are very near to passage. Educators are working very hard to see that the new national legislation includes the components we believe to be good for young children. Most important of these are:

1. Community and therefore family involvement in planning and programs.
2. Provision for as many children as possible, but especially for those who need it most—children from families where it is necessary for the mother to work. There has, of course, been for decades the privilege of private and parochial nurseries, but these have been out of the reach of most children.
3. Emphasis on the child—his learning, health, psychological, and social needs—with de-emphasis on solely custodial care.
4. Provision for the professional preparation of leaders working with children. This is an immediate need if there is to be funding for great numbers of children.

As physical educators, we see a whole new challenge in the spread of public nurseries and day care centers. We have long considered elementary school physical education the basis of the profession. Now we must think of this base as broadened to include three- to five-year-old children as well.

There are also encouraging new developments in primary or elementary education which, in our country, includes the child from 6 through 14 years of age. Before mentioning these, however, I must say that there has been a decrease in funding for all education in our country in recent years. Budget cutbacks and the alarming numbers of young people who drop out of school, both literally and figuratively, have contributed to a crisis in education. While this crisis cannot be considered a blessing, it has forced a new approach to thinking about children and their education.

In an attempt to vitalize learning, and thus to retain the interest of children, there is increasing focus on the affective domain and its contribution to helping children develop a good self-image and a greater desire to learn. Learning how to learn has become an important concept, and physical education is being challenged to make its own unique contribution.

A second important development is in movement education. Our leaders in movement education have been focusing on problem-solving, inquiry, discovery, and creativity in a way that we have never done before. In the past, physical education, music, art, dance, and drama have been considered frills—at least when education money was scarce. Now there is a trend to see them as activities through which children can realize the fuller potential within themselves in a school setting. Movement education is helping them learn to learn.

Elementary educators are also seeing music, art, dance, and physical education as a means of teaching particular concepts. Movement as a medium for learning things other than psychomotor skills opens a very real opportunity for the physical education profession to lead the way. Northern Illinois University in DeKalb and Towson State College, Maryland, are now offering courses for early childhood teachers in which art, science, mathematics, and physical education are integrated through lessons planned around a single concept, such as balance or force. It is an example of our move toward integrating learning through interdisciplinary planning—or to put it another way, of helping a child learn through ways that make learning meaningful and self-fulfilling. As we know, physical education has much to offer in these areas.

As we all know, sports, games, and dance have had a proud history as a means of fostering international communication and bringing people together through play and recreation to reach greater dimensions of understanding. In the 1970s we hope to add some of this cultural heritage to the lives of young children through the current trend toward greater integration of their learning.

Another factor is operating in favor of elementary school physical education. With more and more educators interested in multidisciplinary approaches, motor activity is becoming increasingly important as a means for helping the child with learning difficulties. A great deal is already being done to help handicapped children through physical education and motor activity. Now more perceptual-motor programs are emerging for the normal child. While research lags and little is known for certain about the role of motor skills in learning, the profession is moving to increase the studies in this field. At the same time, physical education is helping the slow learner and the physically handicapped to become more fully functioning individuals, and we are receiving recognition and acclaim for our practice in this regard.

Movement education is moving steadily ahead, and we are developing the strong leadership required to continue the push for the needed research.

One rather surprising development is that the number of elementary physical education specialists is increasing in spite of limited school funds. The reason revolves around the

result of negotiation by classroom teachers for released time which has resulted in a need for music, art, and physical education specialists to relieve the teacher in those areas in which he may feel less confidence. Hence, chances are increasing for primary school children to have a sound physical education.

An interesting development lies in the trend to teach young children by using arts and humanities, including dance, music, and physical education, as the core for other learnings. The American Association for Health, Physical Education, and Recreation is one of four sponsors of a national project to try this approach in five model programs. The hope is that the models will stimulate similar programs on a broad scale. The project, IMPACT, is funded by the U. S. Office of Education (USOE).

Another significant project currently funded by the USOE is its model day care center. Some 50 children of USOE employees will attend the center. This program has been developed through research projects which have received nearly $100 million in grants awarded annually by the National Center for Educational Research and Development.

The center has nearly 7,000 square feet of space with play areas constructed on several levels. The 50 children represent a heterogeneous mixture of three-, four-, and five-year-olds. They come from homes representing a wide income range. Five of them (10 percent), are physically handicapped. In addition to a director, the staff will consist of three teachers and three teacher aides.

Another interesting development is the release of films for teaching the primary school child. Two excellent new ones are A Time to Move and Dance For Joy. These, with other audiovisual resources for young children, are listed on a sheet which will be available to you. A Time To Move focuses on the meaning of movement for the three- and four-year-old. Dance For Joy features two-, three-, and four-year-old children. There is much large motor activity and learnings about space, time, force, and flow.

An exciting event of the past year illustrates the kind of action our national organizations can take to improve education for children. In February, AAHPER and the National Association for the Education of Young Children sponsored a joint conference on the education of young children. It was one of the two AAHPER president's conferences held during my year as president. The conference was given great impetus by AAHPER's Consultant for Elementary Education, Dr. Margie Hanson, who has stressed the need for interdisciplinary relationships with educators in other specialty fields.

Our early childhood education conference brought together outstanding leaders in physical education, dance, and early childhood education. One of the finest speakers was Keturah Whitehurst, professor of psychology at Virginia State

College, Petersburg. She urged a "new conceptualization of development—an integrative philosophy of learning—even a new, common language by which we can communicate with each other without the hang-ups imposed upon us by our compartmentalized learning." Her words underline the pronounced trend toward integrated learning and stress or focus on the individual.

Dr. Whitehurst showed her great understanding of the beautiful part that movement plays in the lives of young children.

> It means freedom to them ... and life ... self-discovery ... discovery of their physical and social environment ... it means safety, which in some cultures might be translated as survival ... it means communication ... enjoyment and sensuous pleasure ... it means acceptance, by one's friends and by significant others. The teaching of movement to children is what makes our profession such an exciting one, and we are happy to report that the 1970s promise much for primary and preprimary physical education in our country.

Movement Education

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You may have heard the well-known Chinese story of the centipede who became immobilized and died of starvation because he was ordered always to move his 78th leg first, and to use his other legs in a particular numerical order. The story is often quoted as a warning against the presumption of attempting to explain movement rationally. Clearly, the unfortunate creature was the victim of purely mechanical regulation that had little to do with the free-flowing art of movement.

Man moves in order to satisfy a need; he aims his movement toward something of value to him. It is easy to recognize the aim of a person's movement when it is directed to some tangible object. Yet, there also exist intangible values that inspire movement.

The primitive joy of movement has been known by everyone at sometime or other. Most of us remember the childish delight of hopping on one leg, or twirling around until the world waltzed by us. There may also be a memory of an adult order telling us to stop fidgeting, or to find something quiet to do. For others, the joy of moving may have been developed by the objective satisfaction of games, the social intercourse of folk or ballroom dancing, or the practical technique of craftmanship. For all of us, movement is the great link between ourselves and every other form of life. We see, therefore, that movement involves invention, execution, and spiritually vitalizing effects.

Man alone has the power of self-reflection, and his inner urge to move has to be assimilated into the acquisition of external skill. Movement is the first way a child expresses himself. It is the way he explores his physical powers and investigates his environment. The development of movement depends on original action and thought by each individual child. Although he moves and grows according to the nature of his kind, he is also subject to the natural laws of movement.

Gravity is the force which pulls everything towards the center of the earth. In order to move, this force must be overcome by energy and so in all orders of life we see a rhythmic cycle of waxing and waning energies.

The quality of movement is like color in painting and harmony in music. While line and design delight the eye and move one to aesthetic appreciation, it is the dynamic quality in movement that speaks to the emotions and conveys the human content of the movement.

To develop this quality it is necessary to understand and experience the elements from which it springs and the motion factors towards which the moving person adopts a definite attitude.

Energy.—Energy can be referred to in terms of growing tension—intense tension with maximum resistance, or increasing relaxation with minimum resistance. With no energy, strength, or power there can be no movement.

Space.—Central movement starts near the main part of the limbs or at the junction of a limb with the trunk (torso), or at the center of the body. In working outward from the central starting point, the design of the movement is curved and undulating. Peripheral movement starts at the extremity of a limb or at the point farthest away from the center of the body. In all examples of peripheral movement there is a characteristic directness, and the design is a direct or undeviating one. Personal space is that area immediately around the body; all remaining area is general space. If there is no pathway or design, there can be no movement.

Speed or Time.—Movement, as it flows away from the body, loses speed, but gains speed when flowing inward toward the center of the body. It can vary from slow and sustained to very quick and sudden. Flow is the manner in which one movement follows another—the harmonious linking of movements that gives continuity. Bound flow occurs where movement can be stopped immediately, if so desire. Free flow describes movements of a more carefree or uncontrolled nature that cannot be stopped immediately. The flow of movement is influenced by the momentum of the body or limbs, the position of the body's center of gravity in relation to the part or parts in contact with the flow or its equivalent, and the attitude of mind. In the full physical education scheme, all these qualities should be developed. The child and his movement are inextricably linked and should be kept so.

As with the primary colors, red, blue, and yellow, the qualities of movement have many gradations. It is possible to make eight basic combinations of these fundamental element changes, and these form the foundation of all shades of movement expression. A study of the essentials of movement requires a knowledge of the possible range of movement in all parts of the body, the ability to observe and analyze movement, and the understanding of how this information can be applied to any physical activity, whether athletic, industrial, or domestic. Such a study should lead eventually to the more economical and efficient performance of all specific skills and techniques.

Every method should be used to enrich the quality of children's movements. To do this, it is essential to influence their minds and imaginations as well as their bodies by words, shapes, colors, rhythms and the use of apparatus to stimulate action. Successful teaching depends on the teacher's own observation and appreciation of what the children can do. Observation and appreciation must be instantaneous and must receive a clear physical response by the teacher. It is not enough to see what the children can do, the teacher must be able to respond to the movements through actual bodily feeling—a kinesthetic sympathy! The natural movements—walking, running, jumping, climbing, crawling, stretching—are taken and developed in all different ways, and together with spontaneity and enjoyment, the child gains an understanding of the movement qualities.

Doing, Feeling, Thinking

It is important that we, as teachers, experience movement ourselves, as well as observe and feel movement. Through this experience and observation we can help each child to do, feel, and think and so develop and realize his own potential.

On starting school, a five-year-old child begins his formal education. He is brought into a society where order and freedom must exist side by side. He is asked to cooperate with others and yet develop his individual talents. His physical education is based on an innate need to find out why and how and a natural desire to do.

As a child gets older he has an increasing awareness of his abilities and his good judgment in relating these to particular tasks. He merits a physical education program which will challenge both his mental and physical powers.

Opportunity must therefore be given to each child to explore, experiment, discover, repeat, select, invent, create, and perfect.

It is essential then, that activities and situations be introduced so that each child can gain experience in adventure and exploration, the meaning of control, increasing his movement vocabulary, and the development of body skills.

Working at his own pace and level, each child will discover, through his own efforts, success, poise, and self-confidence, followed by a basic movement vocabulary built up through responses to a wide variety of challenges, the ability to move well in various situations, and an awareness of space and how best to use it—personally, and in conjunction with others.

The development and mastery of general skill in body management and the special skills related to sports and games is fostered and challenged by the right kind of apparatus. Apparatus should stimulate adventure and/or skill and provide a learning environment. Gymnastics involves the use of apparatus, therefore the movement is objective and functional. It satisfies the child's desire to come to terms with his environment and provides heights, flights, and perilous moments. Game skills involve the acquisition and development of skills in relation to small individual pieces of apparatus such as bats, balls, and ropes. Creative or expressive movement involves movement which is meaningful, creative, and not restricted only to action. It is exciting and adventurous in a way not provided by gymnastics. It expresses and communicates ideas, needs, desires, and frustrations.

Swimming gives the opportunity for a child to move in an environment which produces different relationships between movement qualities. Physical education is concerned not only with physical well-being but also with the education of the whole child. Both objective and expressive aspects of movement form an integral part of learning and make a vital contribution to the flow of ideas in many areas of the curriculum. The film, Free to Move, illustrates the ingredients of a varied and widely based program in nursery and primary schools and the way in which skilled teachers understand and extend the resources of their children through movement.[1] The early part of the film shows young children in a variety of activities, motivated by apparatus, natural obstacles, the desire to explore game-like situations, movement in water, or expression through dance or dramatic play.

Examples of the results of good teaching in swimming and games with older children lead into the second part of the film. This is directed to lessons with infant and junior children, with emphasis on gymnastics and dance. The teachers show the way in which they are able to achieve a high level of skill and involvement through observation and sensitive guidance. Each of these teachers shows how discoveries made by children in their physical education lessons have sparked off further exploration in the classroom and vice versa. There are also illustrations of

[1]Schools Council, Free to Move, Southern Film Production, Brockenhurst Film Studio (Brockenhurst, Hants So 4, 7rd England).

work in arts and crafts, mathematics, music, and language which have been stimulated in this way.

The film aims to broaden our understanding of the ways in which children move and the relevance of this understanding to the child's total education. It aims to show how the teacher's effectiveness in classrooms, hall, playing field, and swimming pool depends on (1) the observation of how children individually and collectively tackle tasks and follow up their interests, (2) the sensitive guidance and suggestions for fuller exploration or improvement of results already achieved. The film gives the opportunity to observe children moving and playing freely in the primary school and a chance to observe the teachers working with children.

Personal experience gives each child the opportunity to understand the feel and flow relationship of lines or curves—to sense differences between large and small, light and heavy, static and dynamic, harmony and discord in the body. And so we find that understanding comes through personal experience—doing, feeling, and thinking—and not through being told.

Improving the Nutrition of Children in Rural Areas

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Probably the two most significant tools in solving the nutrition problems of the world today are (1) education about the contribution of nutrition to the health and welfare of the people, and (2) the production and distribution of a sufficient quantity of food which will meet the nutritional needs of the people. Either one without the other will fail to achieve the objective of a better life for the people and the development of the physical and mental potential of each individual.

Although we speak particularly of educating children, reference to the education of parents, community leaders, professional personnel, and national officials and administrators must be included. Those who inhabit the world of children affect their future.

Poor Nutrition

Malnutrition is a symptom of social and economic ill health of a people. It has roots in ignorance, poverty, cultural mores, poor medical care, and inadequate or nonexistent national policies in nutrition and food. Lack of knowledge of the basic principles of nutrition and their application is found among the poor, the wealthy, the illiterate, and the literate, but the signs of malnutrition are seen most frequently and severely among the economically deprived and illiterate. The

idea that it is expensive to follow a nutritionally adequate diet is incorrect. It is true, however, that the lower the income and the larger the family, the more difficult it becomes to select and secure an adequate diet. If, in addition, there is neither a national nutrition and food policy to regulate food supplies and distribution, nor a system which can be called into action to provide supplemental food for those unable to obtain even a minimal diet, signs of malnutrition begin to appear. These signs appear first among the very young—infants and preschool children—then the school-aged children, and finally, the adults.

The signs of malnutrition in the very young are most easily observed because the infant and young child are less able to adapt to prolonged deprivation. In extreme cases, where neither the amount nor the quality of the food are sufficient to meet the biological needs, kwashiorkor or marasmus result. Among older children, poor growth, apathy, and lowered resistance to infection and disease occur; in adults, reduced work productivity and also lower resistance to infectious disease occur.

In other words, the nutrition status of an individual makes a decided difference in the level of health he can expect to attain and maintain. This, in turn, determines the extent to which he can contribute to society or the extent to which society must oversee his welfare.

Wider medical coverage and the provision of better general health care are likewise important, since much of the malnutrition, particularly protein-calorie malnutrition among infants and preschool children, is precipitated by bacterial and viral infections. Poor environmental sanitation and poor food handling practices likewise contribute to the lowered physiological resistance of all age groups. When the people are poorly nourished as well, the results are seen in apathetic school children, ill health, and lowered work production among adults. Education's role in nutrition improvement is to help people in all sectors of society understand that a low level of nutritional health in a population is damaging, not only to the health of individuals, but also to the economic and social development of the country.

Food Production and Population Growth

Before we speak specifically of the school's participation in improving the nutritional health of children, let us look at the food situation in relation to the population. The Food and Agriculture Organization has, for the past several years, been preparing an Indicative World Plan for Agricultural Development which predicts the amount of food which must be produced to feed the increasing population of the world.

Although there have been gradual increases in food production in many countries, these have not been able to keep pace with population growth.

Between 1938 and 1950 the world's population increased about 1.0 percent. During the period from 1950 to 1960 the increase was 1.9 percent. Over 70 percent of the world's population reside in the less developed countries of the world. Although world food production also increased during this period, the increase occurred in the more developed parts of the world, largely because of scientific and technological advances. Some increases occurred in the developing countries, but the amount of food per capita decreased as a result of the higher rate of population growth. Thus, while the quality of the diet is improving in those countries with small population increases and higher food production yields, countries with rapidly growing populations are barely able to maintain an adequate quantity of food. Most of the calories consumed in developing countries are derived from cereals which lack sufficient amounts of good quality proteins, minerals, or vitamins. It should also be remembered that the per capita food production figures do not reflect per capita food consumption or a level of distribution which will meet the nutritional requirements of all the people.

No one can or should ignore the implications of such a situation, least of all the world's educational leaders. The need for increasing the emphasis on practical education in nutrition becomes a matter of urgency. I should like to stress the word practical, for too often one encounters token efforts in nutrition education, such as memorization of lists of severe deficiency diseases and the nutrients which will prevent them, or learning the foods in a food guide, or playing fanciful games about foods. Almost no attention is focused on daily dietary practices, the ability to secure the needed foods, and their contribution to health.

Nutrition education has been a matter of concern to several of the United Nations agencies for many years, and various efforts were initiated to relieve the malnutrition situation, particularly for children and for pregnant and lactating women in rural areas. In the 1940s, UNICEF began a program of nonfat dried milk distribution to countries throughout the world especially to reach this vulnerable group. Much of the milk was distributed through schools, for as organized units widely dispersed throughout the countries, it was possible to reach more individuals this way than through the less numerous and less well-staffed health centers.

The milk distribution program was continued until quite recently. Insufficient supplies of milk from the donor countries and the expansion of food supplementation activities by other agencies and organizations caused UNICEF to phase out its food assistance program. Prior to this time, however,

UNICEF realized that the milk and food supplementation program was not reaching a large enough segment of the vulnerable groups, and as the number of individuals falling into the need category increased annually, it was impossible to meet the demands. Moreover, it became evident that the answer was not merely the provision of food; an educational program was needed to teach people the importance of eating certain types of food. Without such a program the problems of malnutrition would not only continue, they would increase.

Coordinated Applied Nutrition Programs

Out of this realization a plan was developed that resulted in projects identified as the Coordinated Applied Nutrition Programs. These were supported with technical assistance from the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) and with financial assistance from UNICEF. The objective of these programs was to demonstrate that, through the coordinated educational efforts of the official agencies or Ministries of Health, Agriculture, and Education (and in some countries, community development), people in rural areas could be taught to produce, select, and consume those foods essential to good growth and development in children and the maintenance of health in adults.

In this hemisphere, pilot projects at the community level were initiated in 2 countries in 1959. Later, 16 other countries joined in the programs. Agreements were signed by the Ministries of Health, Education, and Agriculture of each country and the three international agencies. The ministries selected the area of their country for the pilot demonstrations, and identified members of their departments who would assume responsibility for respective parts of the program and serve as counterparts for the technological personnel provided by the international agencies. In most countries national nutrition committees were formed to serve as advisors to the projects. In this hemisphere, one member of the committee was usually designated as coordinator for all activities.

The primary purpose was not to establish new or isolated programs, but to show that the goal of improved nutrition could best be achieved by directing existing manpower and material resources toward a common objective. It was expected that each ministry, in defining and carrying out its specific contribution to the coordinated programs, would eventually incorporate similar activities into its established programs in all communities. Thus, the Coordinated Applied Nutrition Program would be extended throughout the country.

In all programs the major emphasis was directed toward the schools, since a major thrust was to educate the children in the primary schools, and through the influence of schools, reach the adults in the communities. It should be noted that

in some countries in this hemisphere, particularly in rural areas, general education for all children beyond the fourth or sixth grade is uncommon. Consequently, unless nutrition education is conducted in the elementary schools, it may not reach the majority of the children. Moreover, since good nutritional practices require the establishment of good food habits early in life, the younger the child at the time of his introduction to the foods needed, the greater the possibility that he will retain his preference for these foods throughout life.

The pilot projects began with a short period of training for teachers, agricultural extension workers, and health workers. The training consisted of intensive courses in the basic principles of nutrition, fundamentals of health, and methods of food production and food preparation. Seeds and garden tools were provided by UNICEF for the school gardens which were expected to produce the types of foods the community needed to include in its diet. The children cared for the garden (and in some instances, animals) thus learning something about food production. The produce from the garden, when available, was prepared and served to the children in school lunches. Meanwhile, nutrition was to be taught in the classroom.

Agricultural extension agents gave guidance to the schools and encouraged families in the communities to plant the same types of vegetables in their gardens. Nurses and other health personnel conducted education programs in clinics for mothers and other interested people on the importance of nutrition as a means of improving the health of their families. Special emphasis was given to the feeding of infants and preschool children. Over 80 countries throughout the world, 18 of them in this hemisphere, had such projects. Some of them were successful, others were discontinued for a variety of reasons. In the countries where the projects were successful, they were extended into other areas. UNICEF supported the projects for a number of years, but it is now relinquishing support to the governments. The technical agencies, FAO and WHO, however, continue to give guidance as requested by the ministries in several countries.

In this hemisphere, at the request of the governments, the Pan American Health Organization (PAHO) assigns public health nutritionists to country projects to assist national counterparts in the further development of community-oriented nutrition programs and related activities. The services of the PAHO advisers, however, are not limited to rural areas or to schools. These nutritionists give assistance to various projects and programs sponsored by governments. For example, Nutrition Rehabilitation Centers for children between the ages of 18 months and 5 years have been developed, usually in conjunction with health centers. These centers are, to some

extent, day-care projects for malnourished children who are referred by physicians. Children are brought to the centers six days a week where they are given breakfast, mid-morning snack, mid-day meal, and usually another snack before they are taken home in the late afternoon. The unique feature of these centers is the educational programs in which the mother must participate if a child is accepted in the center. The mother must periodically spend the day in the center helping to prepare the food for the children and caring for them. Once a week all mothers attend a class on nutrition which covers such topics as, the kinds of foods children need for growth and health, what foods available in the community should be fed to the child and the family, and how often and how these foods should be prepared.

Moreover, since sound nutrition education programs are dependent upon better professional preparation for teachers, nurses, physicians, and other health personnel, courses on this subject are being introduced into various colleges, universities, and training centers. Presently, there are four-year university degree programs preparing nutritionist-dietitians in 19 Latin American schools for positions which will permit them to assist school and health personnel with their programs.

The Coordinated Applied Nutrition project, while a commendable concept, was far more complicated to implement than its originators had realized. Few countries were experienced in interministerial program planning and integrated program activities. Local resources were often extremely limited, and training was rarely sufficient for the responsibilities teachers were expected to assume. Moreover, there was much mobility among the teachers so that programs started by interested teachers one year were not always continued a second year. In this hemisphere, however, despite the numerous difficulties encountered, these programs, more than any other nutrition activity, achieved the distinction of making governmental authorities aware of the importance of nutrition as an essential factor for health and for social and economic development.

The coordinated efforts of health, education, and agricultural personnel are needed more urgently now than ever before. The teachers are in the unique position of being able to touch more lives than almost any other person in a rural or urban community. They are sometimes referred to as "change agents" in nutrition. They can change the nutritional attitudes of a community for today and tomorrow by means of their classroom instruction and by demonstrating, through their own dietary practices, their regard for the importance of nutrition. The example of the teacher and his attitude toward nutrition should never be underestimated.

Educational systems throughout the world vary considerably. In this hemisphere it is possible to identify the strong influence of several European systems. These have been

modified somewhat by the lack of certain physical facilities, such as classrooms large enough for the students, laboratories, and modern textbooks in the national language. However, many of the techniques of instruction are European. In Latin America there is evidence of a composite system evolving, which uses both European and North American teaching techniques at all levels of education.

Application of Principles of Education to Nutrition Teaching

Nutrition education differs somewhat from many subjects in that its objective is establishing food habits necessary for good growth and development, both physically and mentally. The techniques or methods required for creating in children a desire to eat the right foods rely on familiarity with food rather than an acquisition of facts about food, interesting as these may be. Children possess certain food habits, usually reflecting family dietary practices, when they enter the first grade. Many times these food habits need to be improved or strengthened. There is, of course, no one scheme or plan for teaching nutrition. As everyone is aware, the basic principles of nutrition, which all individuals should apply in their diets, are the same for all segments of society. However, the techniques or methods through which individuals are motivated to learn about nutrition vary widely. Those which are the most effective take into consideration certain important factors such as (1) the age of the individual, (2) his primary interests, background, and experience, (3) his cultural and/or religious food practices, (4) his educational level, (5) the geographical area in which he lives and the availability of food, (6) and the economy of the community and family.

In observing and analyzing nutrition instruction in the classrooms of many countries, including the United States, there are certain characteristics which seem common to all. First, teacher preparation in the subject matter and the methods appropriate for instructing children of different ages is limited. Few teachers appear to possess enough confidence in the subject to effectively translate it into learning experiences suitable for the group being taught. Too often, the teacher only transfers the information instead of offering a well-designed plan of activities to provide an opportunity for the students to learn.

What should teachers know and what should students learn? Before a teacher can properly instruct his students he should possess at least elementary knowledge of the science of nutrition. He should know the kinds of foods available in the community, their nutrition value, cost, and the extent of their usage—i.e. which foods are generally eaten in sufficient quantity by all of the people and which are usually consumed by a relatively small percentage of the population? He should know why certain foods are more acceptable, and consumed in larger

amounts than others. Is it because of their cost, or community or family custom? Are the customs the result of the ease of food availability, religious practice, or have they a status symbol? He should know which foods in the customary diet should be retained and what foods need to be carefully promoted to improve the diets.

You may well say, "Few teachers have time to investigate so thoroughly the nutrition situation in a community." This is correct, but there are nutrition specialists in almost every country who do possess this information. Teachers need only know the nutrition resources of the country to find the information desired.

With his basic information about nutrition and factual knowledge of the community, the teacher is better able to plan interesting and practical experiences with foods which will permit the children to learn something new and different each year. Always, these experiences should be appropriate for the age, interests, and background of the children and should reinforce knowledge already acquired as well as introduce new concepts.

There are three broad objectives which should be achieved in a well-planned nutrition education program for children:

1. Children should learn to eat and like the foods they need which either are, or can be available in the community.
2. Children should learn that the kinds of food they eat make a difference in their health and growth.
3. Finally, children should learn why foods make a difference in their ability to grow well and what qualities some foods possess that make a better contribution than others.

The first objective, learning to like the goods needed for health, should be achieved as early as possible in a child's life. Often, the first two to three years of school offer the child his first planned experiences with food flavors and textures. At this time he can be introduced to many fruits and vegetables. The appropriate technique for teaching the children proper food habits is to let them taste the foods that should be a regular part of their diets.

In the next two or three years of schooling, the children should learn that the foods previously introduced and accepted are not only good to eat but are also important for health and growth. This can be accomplished by making the children aware of their own rates of growth—generally a subject of great interest to children. The feeding and care of small animals or young plants is a most effective way of letting the children learn that every living thing needs food. Some teachers like to have, for comparison, experiments which show the difference between good feeding practices and poor feeding practices. Should the children's schooling not exceed four or five years they will, using this general plan, have established some desirable food

habits and have learned through experience that a proper diet is important to good health and good growth.

If schooling is continued beyond this time, the next objective will be directed toward helping the children learn which elements in the foods are responsible for promoting and maintaining good health. By the time most children are 11 or 12 years old, they are interested in experimenting with all kinds of things. Nutrition offers an excellent opportunity to capitalize on this interest. Nutrition terms, such as fat, carbohydrates, minerals, and vitamins, become much more meaningful if the children carry out some simple classroom experiments. These require a minimum of equipment, but they permit the children to literally "take foods apart" to see what they contain. Animal feeding experiments which permit the students to test the foods further serve to strengthen their understanding of the substances foods contain, and to ascertain which substances are responsible for the differences in growth and health.

Thus, a specifically planned program of experiences for each grade level and the usage of appropriate tools such as the foods found in the community, provide learning opportunities not found in printed words or colored pictures. Perhaps one of the most difficult aspects of teaching nutrition to children is that that, by using a practical approach, taking into account the taste buds as well as their eyes, it seems so simple. It is. It is usually easier to teach words than habits, but it is the acceptance and consumption of foods, not the learning of words, that nourishes the body as well as the mind.

Fundamentally, then, the school's function is to assist or strengthen the development of good food habits. Habits, however, are neither created nor destroyed by a single exposure to a food. Not only the children, but also the parents, need to know about food so that they can support the school's teaching by having the same or similar foods for the family.

In many rural as well as urban communities teachers are offering various educational programs for parents. These support the school's efforts with the children, and extend its influence to all members of the family.

Although a number of countries and agencies have a tendency to emphasize nutrition education for girls and women, it is equally important for boys and men. In many societies, it is the father who decides what will be planted, how much money will be spent for food, and which foods he wants for his diet. The mother may, or may not, be able to alter his decisions.

School Feeding Programs.—No mention has been made of school feeding programs and their relationship to classroom instruction. In a number of countries, school feeding programs are partially or wholly supported from external sources and the food is not always familiar to the children or the community. Because the contributed foods supply only part of the nutrients needed, fresh fruits and vegetables should be contributed by the community or purchased by the school.

Practical education in nutrition is needed to familiarize the children and the community with the new foods and with the necessity for additional food items to make the diet adequate. Since a school feeding program should serve as an example of a nutritionally adequate meal, teachers will need to plan with parents and authorities to coordinate classroom teaching with the school feeding program. In many countries in the Americas, families contribute vegetables from their own gardens for the "pot of soup," or fruits for a mid-morning snack.

Summary

Only the surface of the subject of nutrition education has been scratched in this discussion. Hopefully, it has provided a basis for better understanding the urgency of creating an awareness of the reasons for wise food selection, and specifically, the importance of helping children establish good food habits early in life. Since the development of desirable food habits is a slow process, sufficient time and experience must be allowed to achieve the objectives. Programs must be carefully planned, not only for children but also for parents, in both rural and in urban areas. This education, which affects such a personal and essential part of daily life, plays an important role in the quality of life for the children of today as well as those of tomorrow. Although emphasis has been placed on education in the rural school, it is also an important factor in urban areas, especially where there has been much migration from rural areas to crowded living conditions and an unfamiliar way of life. The change from an agricultural economy to a money economy generally limits the family's food supply early in the period of adjustment. It is therefore doubly important that rural families have some practical knowledge about food values.

Emphasis has been placed on adapting the instructional program to the existing and potential food resources of the community, recognizing the cultural food patterns, and improving those patterns to the extent necessary through appropriately planned learning experiences for both children and adults. Although the educational systems may vary from one country to another, the maxim that people "learn best by doing" still applies—especially in nutrition education, where familiarity with food is required for the creation and establishment of practical and wise food selection and consumption practices.

A hungry child does not perform well in school. A hungry man or woman is not an efficient worker. The quality as well as the quantity of food is essential to health, the quality of life, and the social and economic welfare of a nation. The teachers have a major part to play in improving the quality of life.

Outdoor Education in the 1970s

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There will be more outdoor education than ever before in the 1970s. Outdoor education, as conceived in this presentation, has two major aspects: (1) education in the outdoors, which encompasses those learnings that occur most effectively in outdoor settings, and (2) education for the outdoors which includes the teaching of skills, attitudes, and appreciations necessary for satisfying outdoor interests and pursuits.

Education in the Outdoors.—The outdoors serves as a laboratory for learning and is an extension of the classroom. Learning is vitalized and motivated through the real and direct experiences that occur in outdoor learning environments. Classroom activities are supplemented through outdoor learning experiences and some objectives of education, impossible to achieve completely in the classroom, are realized through "teachable moments" in nature's well-equipped laboratory. Freed from the limitations and abstractions of the classroom, children and teachers engage in creative and exploratory experiences that lie beyond the four walls.

Education for the Outdoors.—Education for the outdoors offers new opportunities for acquiring skills and interests which lead to lifelong satisfactions and contribute immeasurably to the worthy and wholesome use of time. This aspect of outdoor education has special implications for health, physical education, and recreation, for the teaching of skills and

appreciations that have lifelong values is one of the major concerns of these fields.

This broad concept of outdoor education has been described as:

> . . . a means of curriculum enrichment through experience in and for the outdoors. It is not a separate discipline with prescribed objectives like science and mathematics; it is simply a learning climate which offers opportunities for direct laboratory experiences in identifying and resolving real-life problems, for acquiring skills with which to enjoy a lifetime of creative living, for attaining concepts and insights about human and natural resources, and for getting us back in touch with those aspects of living where our roots were once firmly established. [1]

One of outdoor education's major contributions is the development of an awareness of the natural environment and man's relationship to and responsibility for it. Outdoor education has become a timely emphasis in which learning in and for the outdoors is an integral part of education. Outdoor education is interdisciplinary in nature and relevant to many of the learning activities in a broad educational program.

Factors in Outdoor Education Growth

A brief look at some of the forces that have given impetus to the increasing influence of outdoor education will help us view the developments that are occurring in this decade. Outdoor education, as it is broadly conceived today, has been shaped by educational needs, rediscovery of the natural environment, and the need for environmental improvement.

Educational Needs. —There is a continuing search for learning experiences that are relevant to the needs and interests of the learner and consistent with the nature of learning. Outdoor education, often unidentified as such in earlier years, was one of many innovations which provided relief from a "sterile" curriculum. In the United States, for example, outdoor education is one application of the ideas of educational philosophers and curriculum specialists such as Dewey, Kilpatrick, Kelley, and others. L. B. Sharp of Life Camps, Inc., can be credited in expressing what has become accepted as a basic premise of outdoor education as it emerged in the late 1930s:

> That which can best be learned inside the classroom should be learned there.

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[1] Julian W. Smith, et al., Outdoor Education (Englewood Cliffs, N. J.: Prentice-Hall, 1963), p. 19.

> That which can best be learned in the out-of-doors through direct experience, dealing with native materials and life situations, should there be learned.[2]

In the period extending from the late 1930s to midcentury, resident outdoor education programs grew and "school camping" became an acceptable way of extending the classroom. Concurrently, there were developments in several countries in out-of-classroom education identified by various terms, such as ventures in the countryside. Some of these programs were resident on a day basis:

Rediscovery of the Natural Environment.—The great surge of interest in outdoor pursuits as a way to escape the tensions and boredom of cities and for the wise use of leisure has broadened the concept of outdoor education to include an emphasis on the acquisition of skills and attitudes necessary for quality outdoor recreation. Thus, education for the outdoors became another mission of outdoor education—to educate a generation of people who have lost contact with and an understanding of the natural environment.

Need for Environmental Improvement.—The impending environmental crisis and the awakening of the public to the need for care and protection of the outdoors is giving a great impetus to outdoor education as a way of learning in the 1970s. The earlier developments in education that led to the use of the outdoors as a laboratory for learning, and the urgent need to teach people how to enjoy and appreciate the outdoors and to participate in all forms of outdoor sports and component skills, laid a foundation for the current concern about man and his outdoor environment. Outdoor education has become an effective way of teaching in the affective and psychomotor domains, and the cognitive domain can reinforce and add depth of meaning to outdoor experiences. No other approach to education holds more promise for changing human behavior for the improvement of the quality of the environment than outdoor education.

Outdoor Education Programs in the 1970s

Outdoor education in this decade is showing growth in several of the established types of programs, such as the resident outdoor program and use of the outdoors as a learning laboratory. There are, in addition, several significant new developments, some of which are in the secondary schools and colleges. Some of the trends and programs in progress include enrichment courses, outdoor laboratories, resident outdoor schools, teaching of skills with carry over appeal, work-learn programs, adult education programs, and professional training programs.

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[2] L. B. Sharp, "Introduction" to Outdoor Education for American Youth (Washington, D. C.: AAHPER, 1957).

Enrichment Courses. —Outdoor-related classroom learning and units of study are being included in the regular school curriculum with appropriate outdoor resources and materials to enrich and enhance the learning environment. Field investigations and trips to outdoor areas of special interest are becoming established instructional activities in many schools.

Outdoor Laboratories. —Educators are making use of the school site and nearby school and community properties, such as farms, gardens, parks, recreation areas, forests, lakes, streams, and other natural areas as laboratories. Field experiences in such settings are appropriate in many subject matter areas and activities, such as science, social studies, communication arts, mathematics, music, art, and others. Nature centers, environmental studies areas, and science field study centers are examples of the many kinds of outdoor laboratories that are developing.

Resident Outdoor Schools. —Resident outdoor schools are being developed where students and teachers use camp settings for learning opportunities that are best achieved in a camp community and outdoor laboratory setting. This is one of the most sensational and effective forms of outdoor education. It offers unlimited opportunities for learning centered around social living, healthful living, work experiences, outdoor skills and interests, and the application of many of the school's educational objectives and purposes. On school time and as a regular part of the curriculum, the outdoor school serves to motivate and vitalize learning and contributes greatly to the development of good human relationships, better understanding between students and teachers, and opportunities for democratic living.

Teaching of Skills with Carry Over Appeal. —The teaching of outdoor-related skills for outdoor interests and pursuits is a timely aspect of outdoor education. These skills and sports include casting and angling, shooting and gun safety, boating, other water activities, water safety, archery, and winter sports. Other special outdoor interests and hobbies are often associated with school subjects, clubs, intramural activities, and school recreation. In many instances, outdoor-related activities are conducted through the cooperation of community agencies, park and recreation departments, nature centers, and other local and state organizations.

Work-Learn Programs. Work-learn experiences in outdoor areas for secondary school youth, such as land improvement, forest and game management, facilities construction, conservation projects to improve the natural environment, and learning outdoor skills and interests are challenging and effective forms of outdoor education. Somewhat reminiscent of the Civilian Conservation Corps in the United States during the 1930s, a number of school-sponsored outdoor programs are proving effective, particularly for potential dropouts who do not

thrive on the academic diet of the traditional secondary school. Such programs combine purposeful work experiences with practical applications of knowledge and skills in the subject matter areas and activities of secondary schools. An added dimension is adventure through exciting and vigorous outdoor activities. Particularly in secondary school programs, challenging and exciting outdoor pursuits, such as canoe trips, outpost camping, and skiing, add much to the outdoor experiences.

Adult Education Programs. —The increased interest of the public in all forms of outdoor sports and activities has prompted adult and continuing education courses and community recreation agencies to offer opportunities in outdoor education. Family camping clubs, for example, provide ways for those interested in camping and travel camping to acquire camping skills, information on camp sites, historical and scenic attractions, and practical information about trip planning, food preparation, and the design of camping equipment. Displays of equipment, family camping shows, trading posts, and courses in family camping are increasingly popular features in adult outdoor education. Other examples include adult education courses in fly tying, lapidary activities, casting clubs, shooting instruction, archery, boating, and many others.

Professional Training Programs. —There is an increasing number of outdoor education in-service programs for teachers and activity leaders conducted by local schools, colleges and universities, and professional education agencies. Most of these are conducted in outdoor settings where participants may have good experiences in the outdoors which will help develop self-confidence in outdoor teaching.

Outdoor education, as it is developing, generally, around the world and specifically in the United States, is in keeping with the basic principles of learning and the best curriculum practices. The reaches of outdoor education are inherent in the objectives of education and are implemented through direct and concrete learning experiences within the cognitive, affective, and motor performance domains of education. Outdoor education appears to be making its unique contribution, however, in the affective domain. This is particularly significant in assessing the contribution of outdoor education to environmental quality. Some of the outcomes of outdoor education, as observed by many experienced teachers and administrators, are:

1. better self concept (self-realization)
2. awareness of and respect for the natural environment
3. adventure in learning
4. better human relationships and more effective communications
5. behavioral changes (social, teacher-student and student-student, care and protection and improvement of the physical environment)

6. lifelong interests and skills for the constructive use of time
7. creativity
8. development of the inner man (spiritual).

Teacher and Leadership Preparation

Concurrent with the growth and trends in program development in outdoor education has been the impact on teacher and leadership preparation. There have been significant changes in the preparation of teachers and leaders for outdoor education in several directions:

1. Interdisciplinary approaches and interdepartmental cooperation have been increasing in professional preparation at both the graduate and undergraduate levels. Those interested in outdoor education are exposed to a wide variety of experiences in appropriate subject matter fields and activities.
2. Basic courses have been modified and adapted to include information and experiences relating to outdoor education.
3. More field investigation activities have been included in appropriate areas of learning, such as science, social studies, art, and others.
4. Student teaching and internships are being included in schools and communities with on-going outdoor education programs.
5. In graduate programs, outdoor education is now an area of emphasis for administrators, supervisors, and coordinators of outdoor education. Examples include such major fields as health, physical education, recreation, curriculum, administration, elementary education, continuing education, and guidance and counseling.

There are many ways that strong outdoor education leadership can be provided in the nations of the world. Professional education associations, governments, universities, industry, and other groups representing education, natural resources, and facilities can, by working together, provide leadership and the necessary resources for outdoor education.

An example of national leadership in the United States is the Outdoor Education Project of the American Association for Health, Physical Education, and Recreation. The project is a business-industry-education venture which, since 1955, has been a spearhead effort in leadership preparation, program development, and preparation and distribution of instructional materials. As a result, thousands of school and college administrators, teachers, and physical education, recreation, camping, and conservation leaders have been involved in workshops. Hundreds of new kinds of programs are now under way.

THE ROLES OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

Health, physical education, and recreation have significant roles in outdoor education and much of the leadership to date has come from these fields. Administrators and teachers in health, physical education, and recreation have a dual role which includes a major responsibility for teaching outdoor skills in the regular school program, and being a member of the "team" as a resource leader when the outdoors is used as a laboratory. HPER leaders can and should lead outdoor education because:

1. They teach children in informal and out-of-the-classroom settings, and have opportunities to see the "whole child."
2. They have had more training and experience in outdoor activities, such as outdoor recreation skills and camping.
3. The nature of health, physical education, and recreation encourages a greater familiarity with community facilities and leadership.
4. Much of the content and activities of these fields can be taught effectively in outdoor settings.

There can be no doubt that physical development, movement, and active recreational pursuits are directly related to the acquisition of skills, attitudes, facts, and concepts that result in desirable behavioral changes in man and his relationship to the world about him. It is especially in the affective and psychomotor domains that health, physical education, and recreation have strategic responsibilities for helping man to keep in harmony with his physical environment, and for contributing to the enrichment of life through participation in healthful and wholesome outdoor pursuits. The development and maintenance of an optimum level of physical fitness and health enables the individual to cope more effectively with stress and with the complexities of living. Physical exercise, such as walking, cycling, and other outdoor activities, makes the individual less vulnerable to sedentary living, less dependent upon air-polluting transportation, and more aware of the importance of a good physical environment.

Play and games give everyone an equal chance for successful participation, regardless of ethnic, social, and economic background. They contribute much to the development of better human relationships and human ecology.

The enjoyment of outdoor skills which are dependent on land resources, gives the individual a personal stake in the physical environment. This motivates him to action to protect and improve the outdoor heritage which makes his life rich and pleasant.

Physical education makes a major contribution to the social and cultural goals of education through activities such as dance, play, competitive games, and skill development, all of which have a part in developing self-respect and respect for others. Playgrounds, open spaces, and gymnasiums can be among the most effective laboratories for both individual and group development.

Recreation, in its broadest aspects, has great potential for maintaining a balance in life. It has been said that the creation and re-creation of man's values occur mostly during his leisure time. It is ironic that the societies which have afforded the greatest amount of leisure time for the masses have largely failed to provide adequate education for the wise use of leisure. Schools and colleges have a colossal task in teaching people to use time constructively. The health, physical education, and recreation fields have major responsibilities in these important aspects of education.

DIRECTIONS FOR THE FUTURE

The contributions of outdoor education to the improvement of learning and to the growth and development of the individual are increasingly significant as the 1970s develop. They constitute one of the most important trends in education in the past several decades. The most far-reaching trends for the future rest upon the visions and dedicated services of the world leaders, such as those assembled in this conference. Outdoor education is becoming one of the greatest forces for developing better human relationships and understandings among diverse peoples and cultures in our world. Love and appreciation of the physical universe, adventure and challenge of vigorous outdoor sports and interests, tranquility, peace, and spiritual growth constitute a common bond among us. Thus, the interchange of ideas in world conferences, the crossing of national boundaries to participate in camping and other outdoor activities, and summit meetings of those who see visions of peace and harmony may well find beginnings in this decade. Our challenge is eloquently expressed by Aldo Leopold when he said that our job is, "not of building roads into lovely country, but of building receptivity into the still unlovely human mind."[3]

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[3]Aldo Leopold, A Sand County Almanac (New York: Oxford University Press, 1966), p. 220.

Research Needs in Girls and Women's Sports

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I welcome the opportunity to tell you about the apparent need for research in girls and women's sports. In preparing this report I consulted several nationally-known research people and looked through many reference files, magazines, books, and other materials for significant timely research on the woman athlete. I believe the most startling result of my search is the fact that there is very little recent research on the female athlete in comparison to the amount of research on the male athlete. Any research that has been done with men should be repeated for women.

There are four main reasons why studies of the problems of female athletes is needed and highly justified in today's sport setting. First, their problems differ from those of male athletes because of the special role the female organism plays in reproduction; second, the number of participating female athletes is much greater now than in the past; third, modern training is strenuous and there are opportunities for more intensive and extensive competitions; and fourth, the psychological and sociological factors involved are unique to the female athlete.

At present in the United States, there are several isolated studies in progress on the personalities of women athletes. Some of the questions that need to be answered are:

1. What motivates a girl to start a sport?
2. What motivates her to stay involved?
3. At what age does she start?
4. What role do others (family, friends, coach) play; do they influence the girl in her selected sport?
5. What is the role of other influences, such as environment, economic situation, culture, or society?

The mass findings of these studies will be computerized to devise a series of models which will help us to recognize and nurture the potential talented female competitor.

We need to trace the athletic history of young girls from the age of five and up. We need to keep records over a set period of years to pinpoint the significant factor(s) that make one child a better athlete than another.

Dr. Carol Mushier of the State University of New York, College of Cortland, commented on research and needs:

> Questions related to the differences between the athlete and nonathlete, athletes in different sports, and athletes at different levels of competition have been investigated, but the general plea of research of this type is for longitudinal studies in order to provide the answer to the following question, "Does sports competition mold personality, or does the activity attract certain types of personality? Are there such studies in process now?"[1]

Femininity is lacking in a few competitive sportswomen, and this often has resulted in the supposition that sports have a masculizing effect on the woman athlete. However, Dr. William W. Heusner, a physiologist at Michigan State University, has pointed out that, "the majority of female athletes show no signs of masculization after years of vigorous competition."[2] G. J. Erdelyi stated in the Journal of Sports Medicine and Physical Fitness that, "these women who do exhibit male characteristics in build and character probably had such android tendencies prior to competition and were successful because of their genetic make-up."[3] Many young girls and women have a deep psychological fear that sports are a threat to their sex role and self-image. Therefore, they establish very limited boundaries concerning their own participation in

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[1] Carol Mushier, "Women in Sport: Needed Research and Future Directions" (Speech given at the North American Society for the Psychology of Sport and Physical Activity, Chicago: April 1, 1971).

[2] William W. Heusner, "Basic Physiological Concepts as They Relate to Girls Sports," Proceedings of the Second National Institute on Girls Sports (Washington, D.C.: AAHPER, 1966).

[3] G. J. Erdelyi, "Gynecological Survey of Female Athletes," Journal of Sports Medicine and Physical Fitness 2:174-79.

sports. We need longitudinal research in the area of genetics and the woman athlete in order to obtain facts.

We need case studies of women athletes to help us see the total picture.

We know that an individual's cultural background considerably influences her interests and ambitions. The whole Olympic approach, the cultural influences of races and ethnic origins, need to be studied in relation to the woman athlete.

Recent studies have proven that certain structural differences between the black man and the white man gives the black man an advantage in some athletic endeavors—but what about a comparative structural study of the black woman and the white woman athlete?

How do we account for the success of our very young female Olympic swimmers, skiers, skaters, gymnasts, and track competitors, ranging from 11 years of age and up?

We know that the athlete is a combination of physiological, psychological, and sociological basic factors. Most research on the male athlete is based on physiological phenomena and physiological boundaries, although there have been some significant studies on psychological and sociological aspects.

Today we are much more aware that sociological aspects influence the success of an athlete, but these aspects seem to play a much greater role in the total success of a girl athlete than a boy athlete. We much encourage further study on the woman athlete in the sociological area.

There are many other possible topical areas that need study in girls and women's sports. The following suggests topics that might be of interest to ICHPER members.

1. The forces which appear to motivate amateur and professional women athletes
2. An examination of some of the conflicts in values noted in sport situations and their influence on the woman athlete and the nonathlete
3. Women and sports in modern society: the sociological and psychological aspects
4. The opportunities for developing and enhancing femininity through sports for girls and women
5. Values of athletic performance during menstruation
6. An examination of the Olympics in relation to the woman athlete.

In conclusion, I would like to recommend that ICHPER provide some means and ways to encourage world-wide research on the woman athlete and also to disseminate information about what is being done and what needs to be done. I feel sure that there are many completed studies of vital interest that have never been disseminated beyond the confines of local, regional, national, or continental boundaries only because the possibility of international sharing and publication has not been presented to the researchers involved.

ICHPER Recommendations 1971

I. Be it resolved that this, the 14th Annual Congress of the International Council for Health, Physical Education, and Recreation, meeting in Kingston, Jamaica, July 30 to August 3, 1971, pursuing the theme "New Directions for the 70's" and recognizing the facts of deteriorating societal and cultural influences of positive worth, states firmly that there is a persistent and a continuing need in all countries for the educating of children and youth for human progress and personal productivity through the means of health, physical education, and recreation.

These are continuing responsibilities for education:

1. Children and youth must be given knowledge through planned instruction on how to make and to maintain a healthful biological and fully human condition.

2. Children and youth must be taught and become practiced in ways of worthy social and cultural recreation practices in the use of leisure time.

3. Children and youth must be provided with facilities, encouraged by schedules, and directed through envisioned leadership for the development of interest and participation in activities, games, sports, dance, gymnastics, and athletics which will endow them with bodily vigor and full human capacities.

II. Be it resolved that all members of the ICHPER shall work in national efforts to gain the support of national medical associations for the endorsement of sound programs which give emphasis to health, physical education, and recreation.

III. Be it resolved that all participants in the 14th Annual Congress of the ICHPER shall return with renewed vigor to their professional positions and through their personal and professional effort and excellence they shall attempt to improve all aspects of the programs of health, physical education, and recreation for which they have any responsibility.

END